

**4. Prodloužená mícha, hranice, zevní popis a obecné uspořádání šedé a bílé hmoty**

**5. Prodloužená mícha, šedá hmota – základní jádra**

**6. Prodloužená mícha, bílá hmota – základní spoje a jejich funkce**

**7. Varolův most, hranice, zevní popis a obecné uspořádání šedé a bílé hmoty**

**8. Varolův most, šedá hmota – základní jádra**

**9. Varolův most, bílá hmota – základní spoje a jejich funkce**

**10. Mezencefalon, hranice, zevní popis a obecné uspořádání šedé a bílé hmoty**

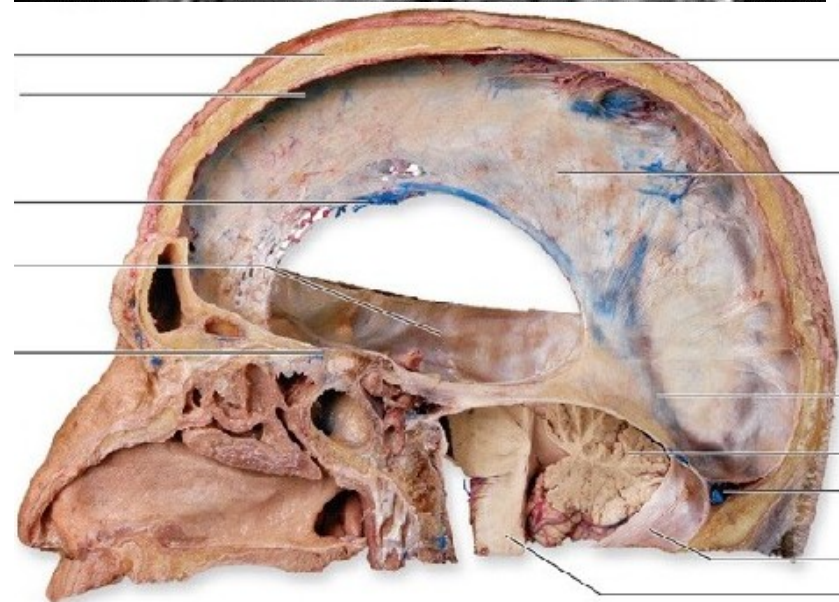
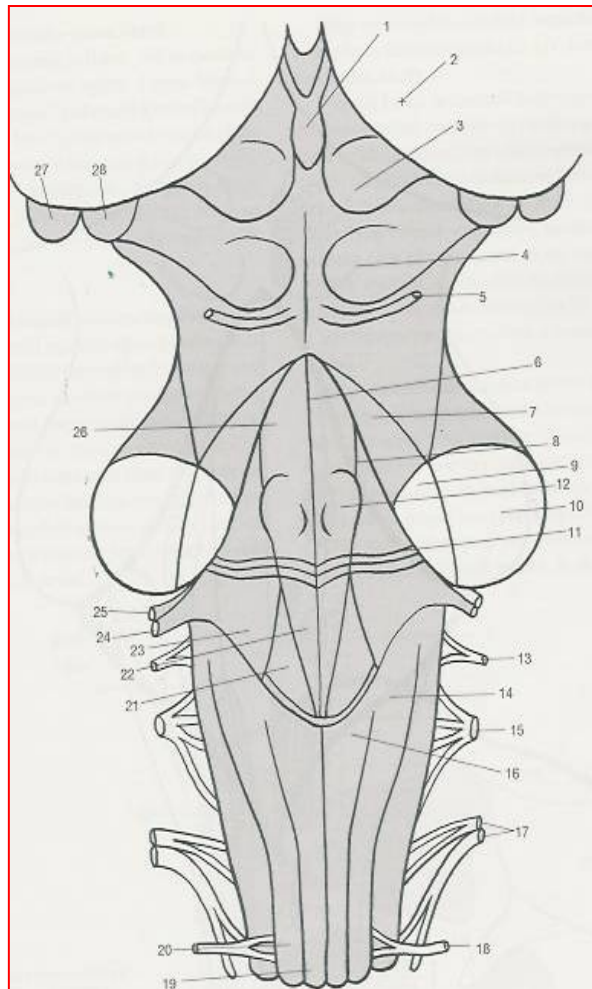
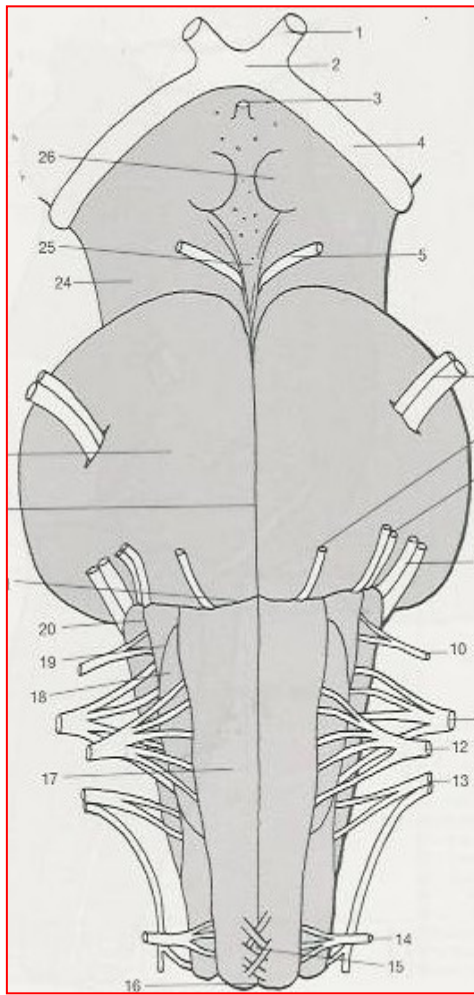
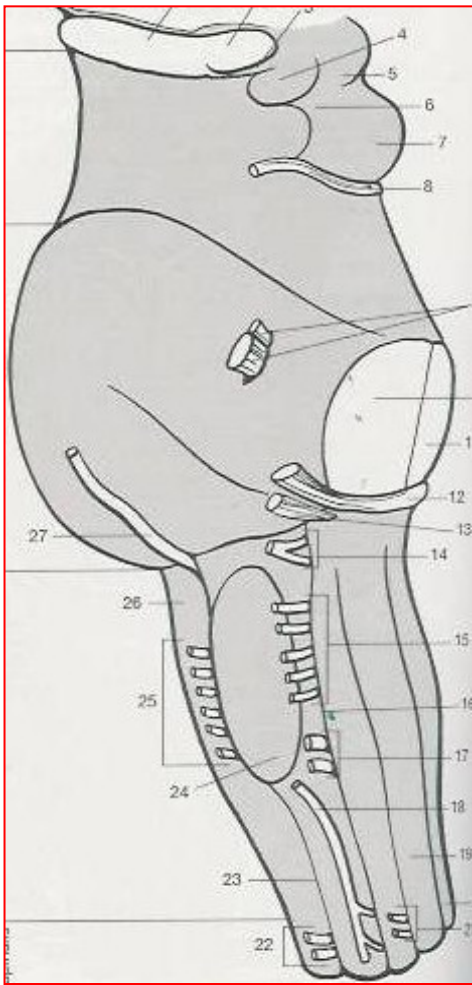
**11. Mezencefalon, šedá hmota – základní jádra**

**12. Mezencefalon, bílá hmota – základní spoje a jejich funkce**

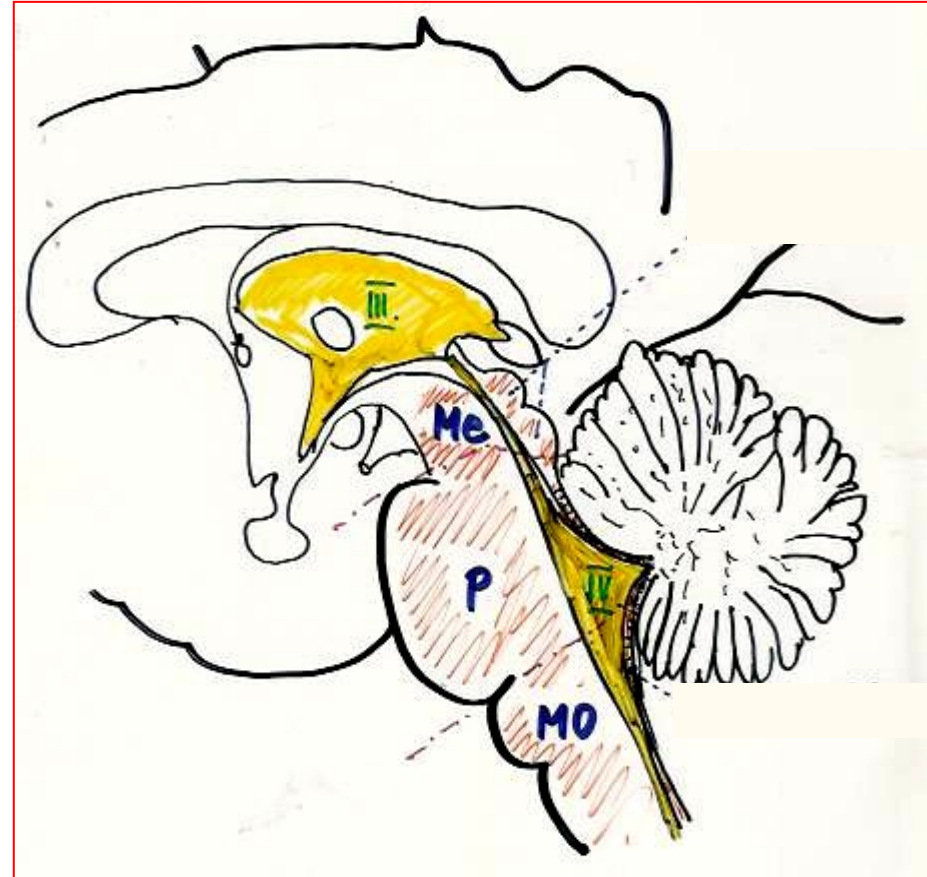
**13. Retikulární formace mozkového kmene a její funkce, základní jádra**

# KMEN MOZKOVÝ – longitudinální členění

Části kmene na sebe kaudo-rostrálně navazují a mají v základní rysech shodnou stavbu a funkci



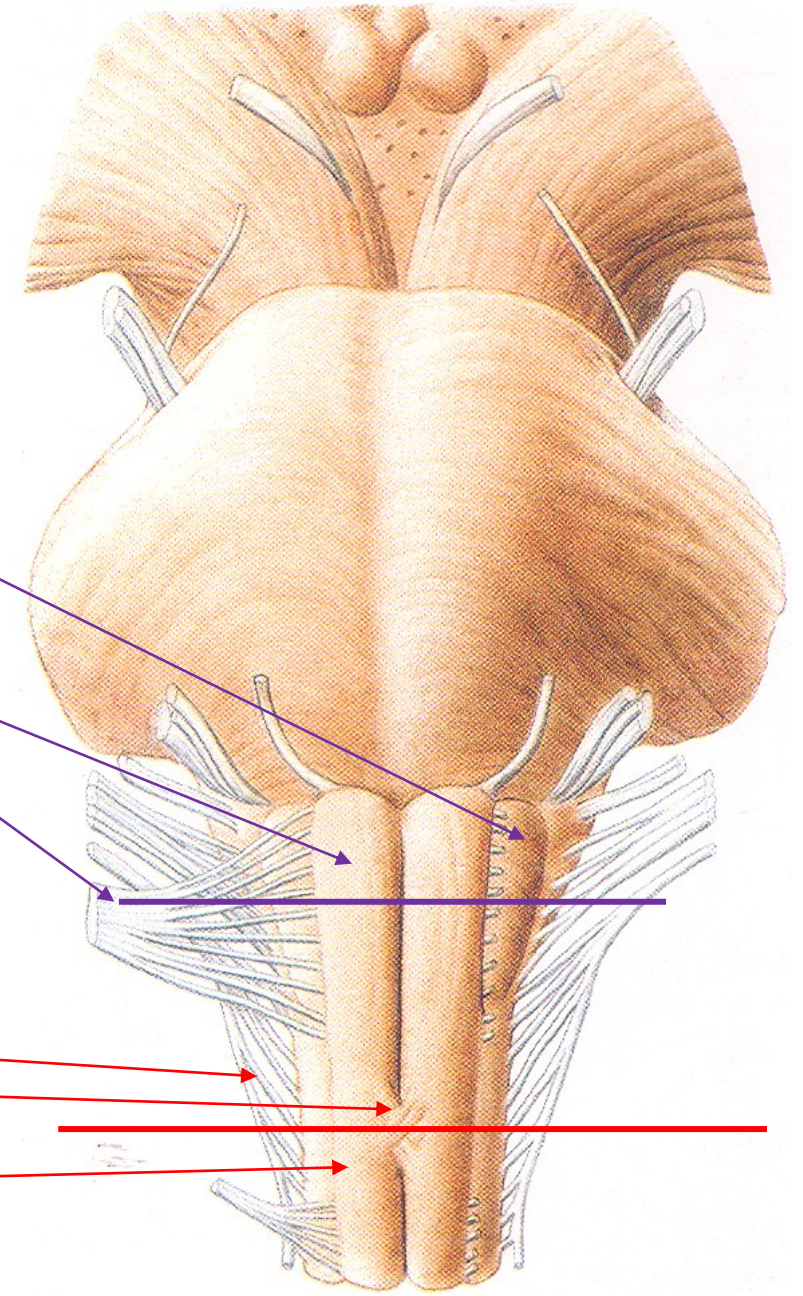
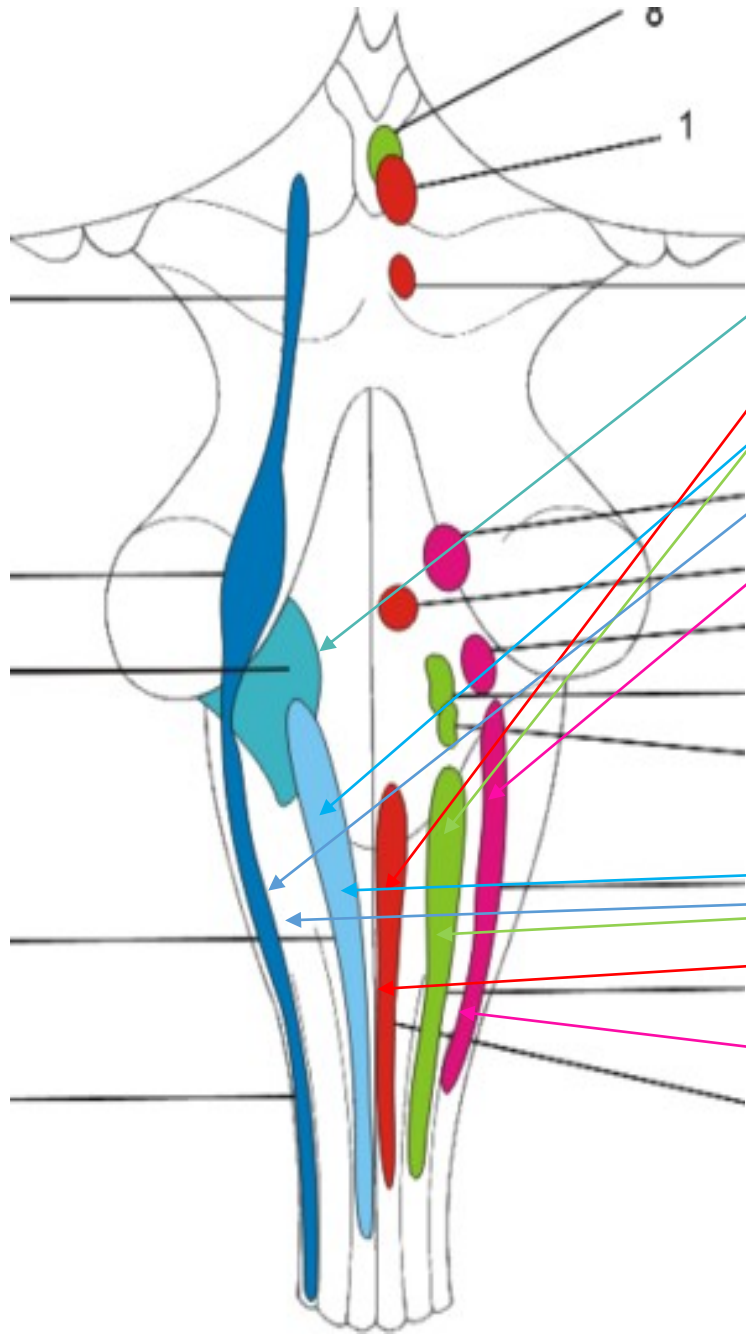
# ŠEDÁ HMOTA TEGMENTA MOZKOVÉHO KMENE





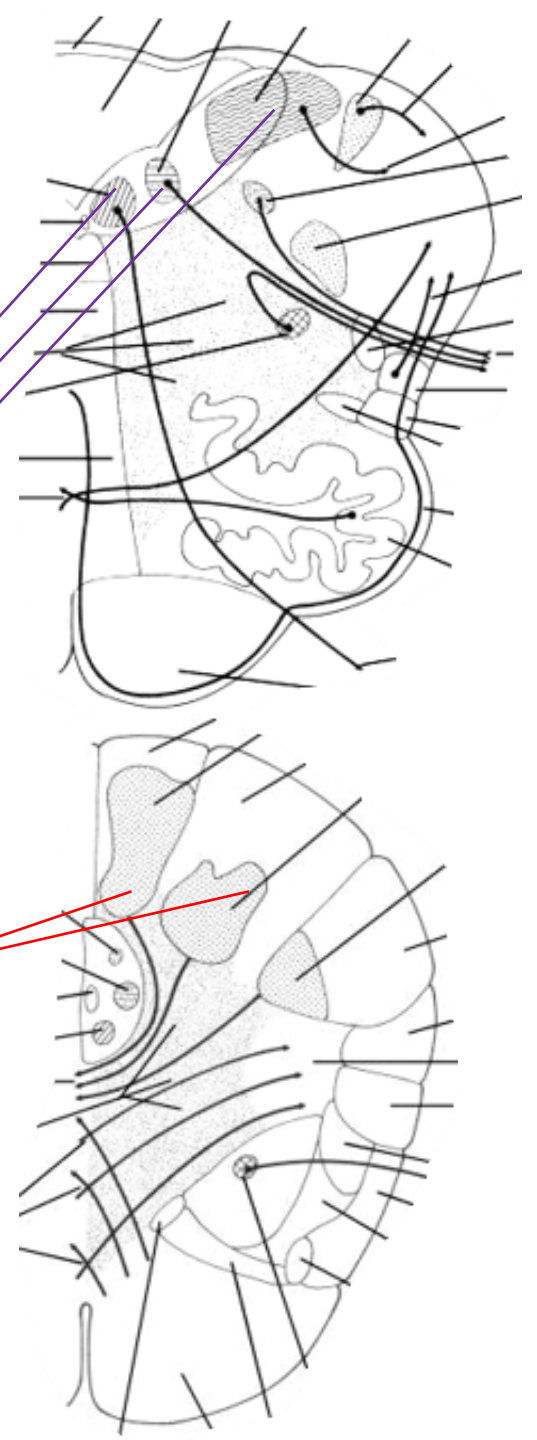
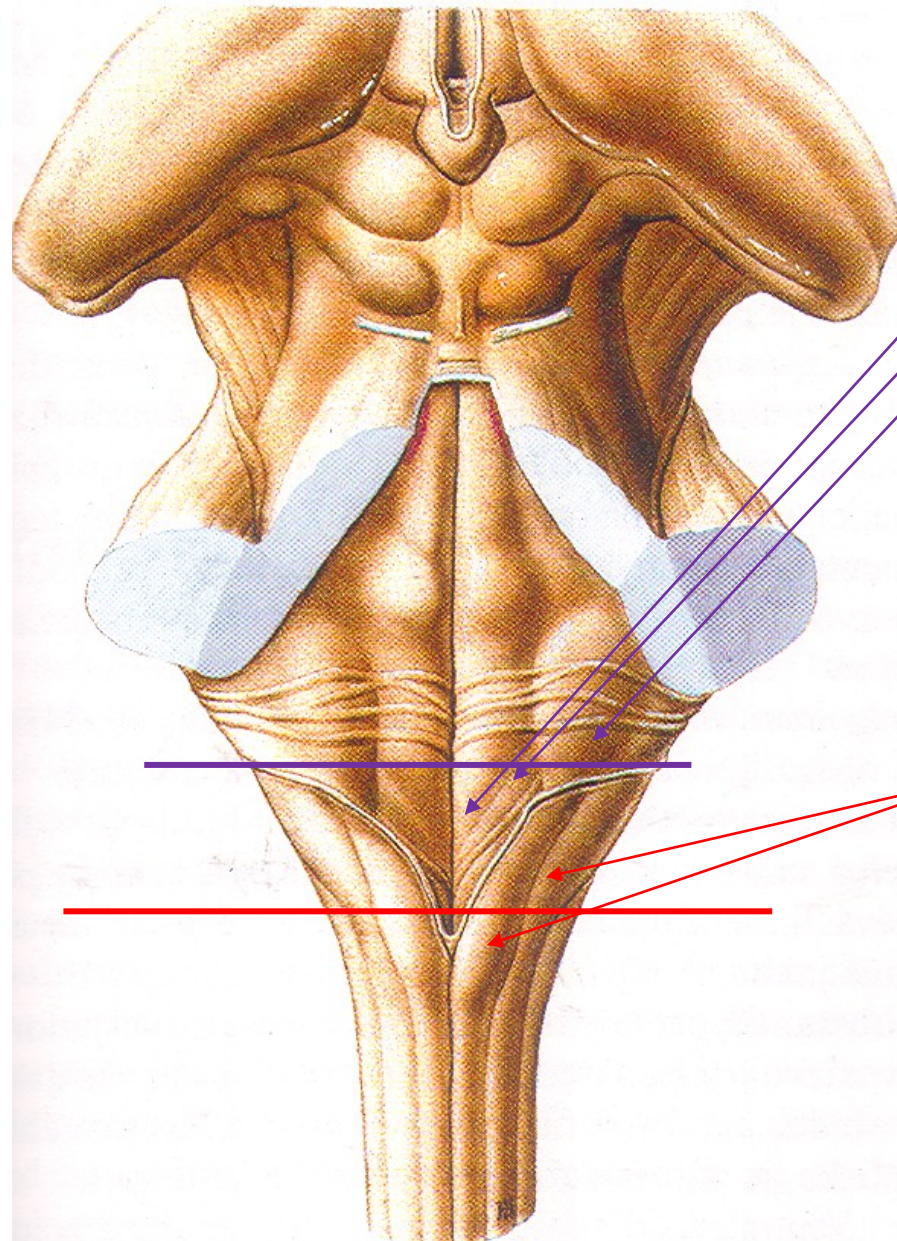
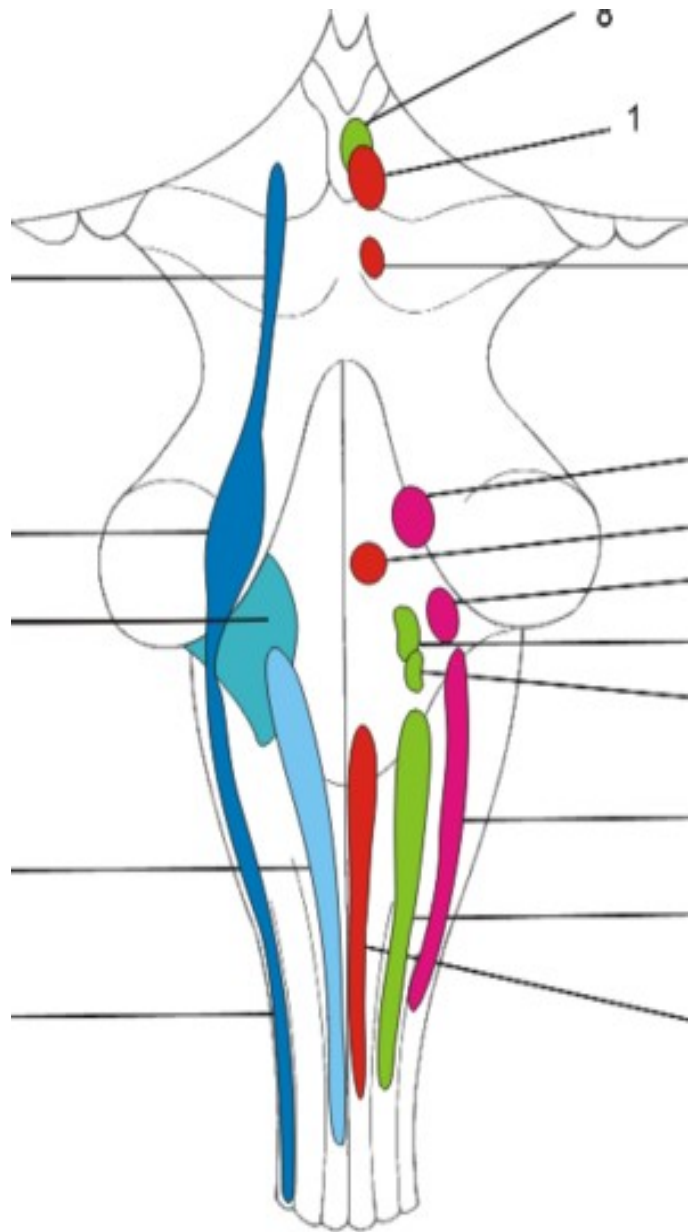
**Medulla oblongata**

**VENTRÁLNÍ STRANA MEDULLA OBLONGATA**





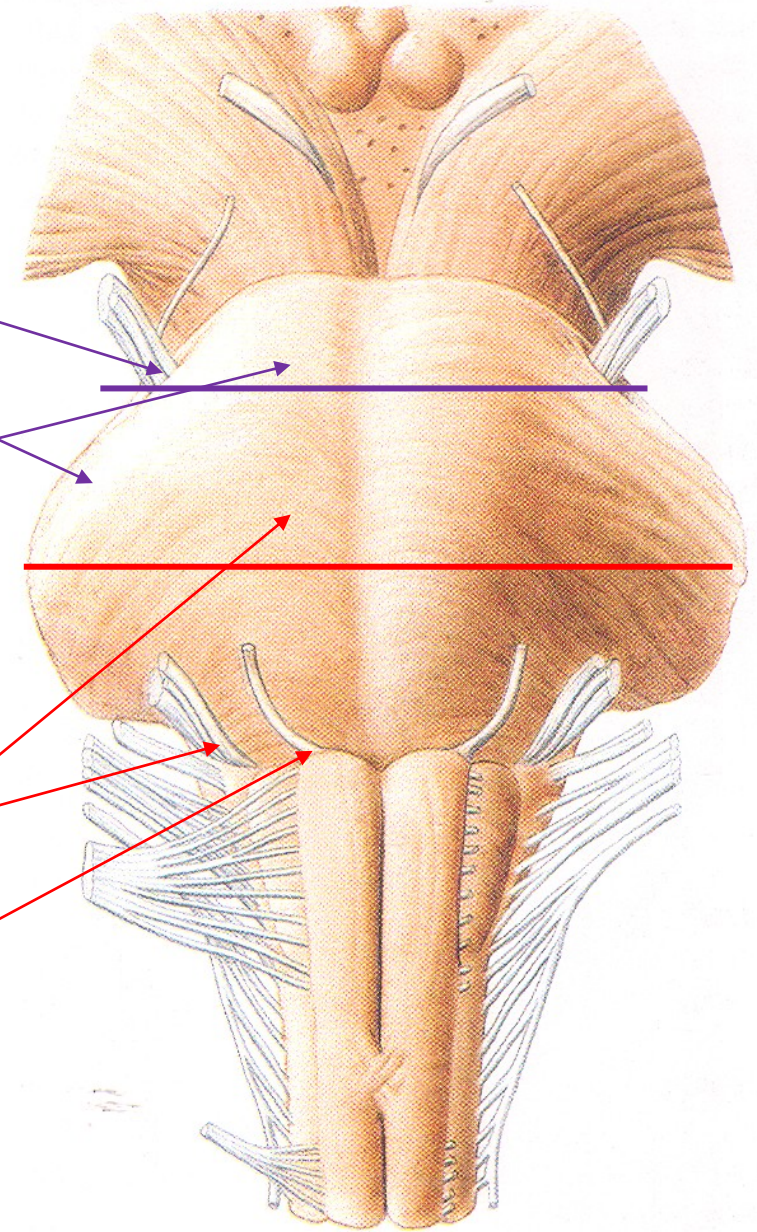
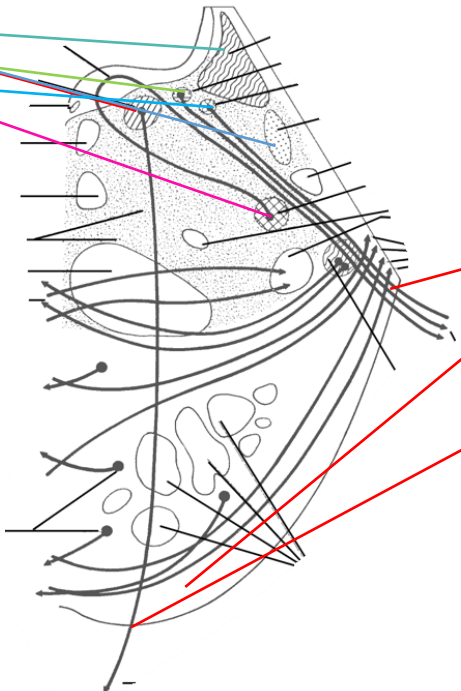
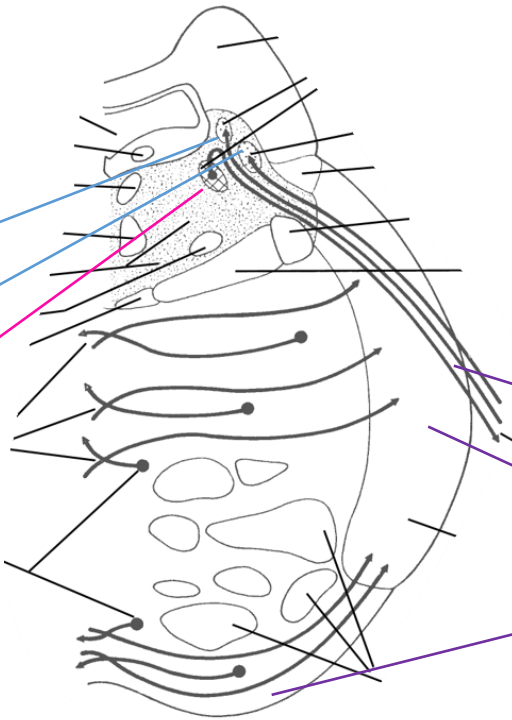
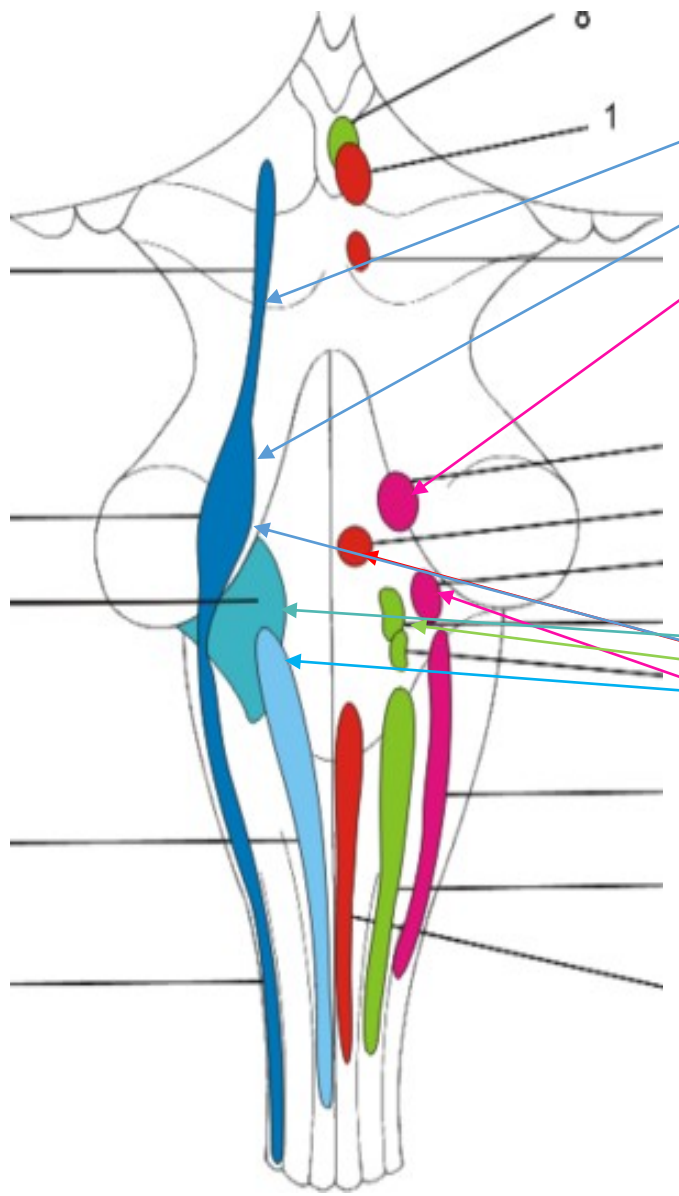
# DORSÁLNÍ STRANA MEDULLA OBLONGATA





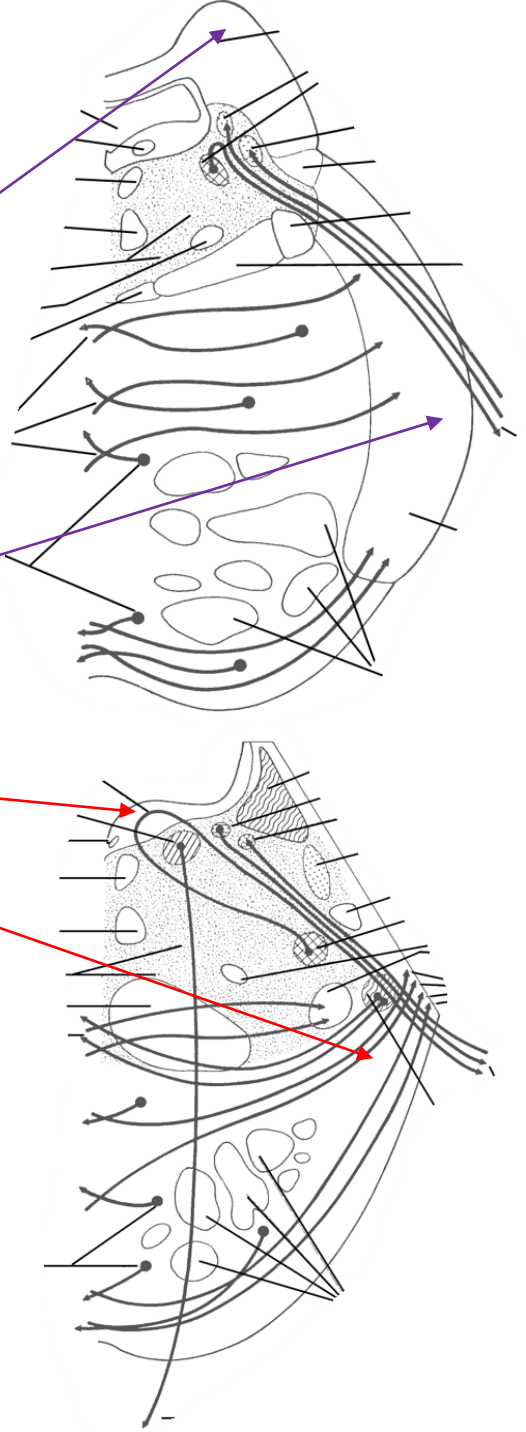
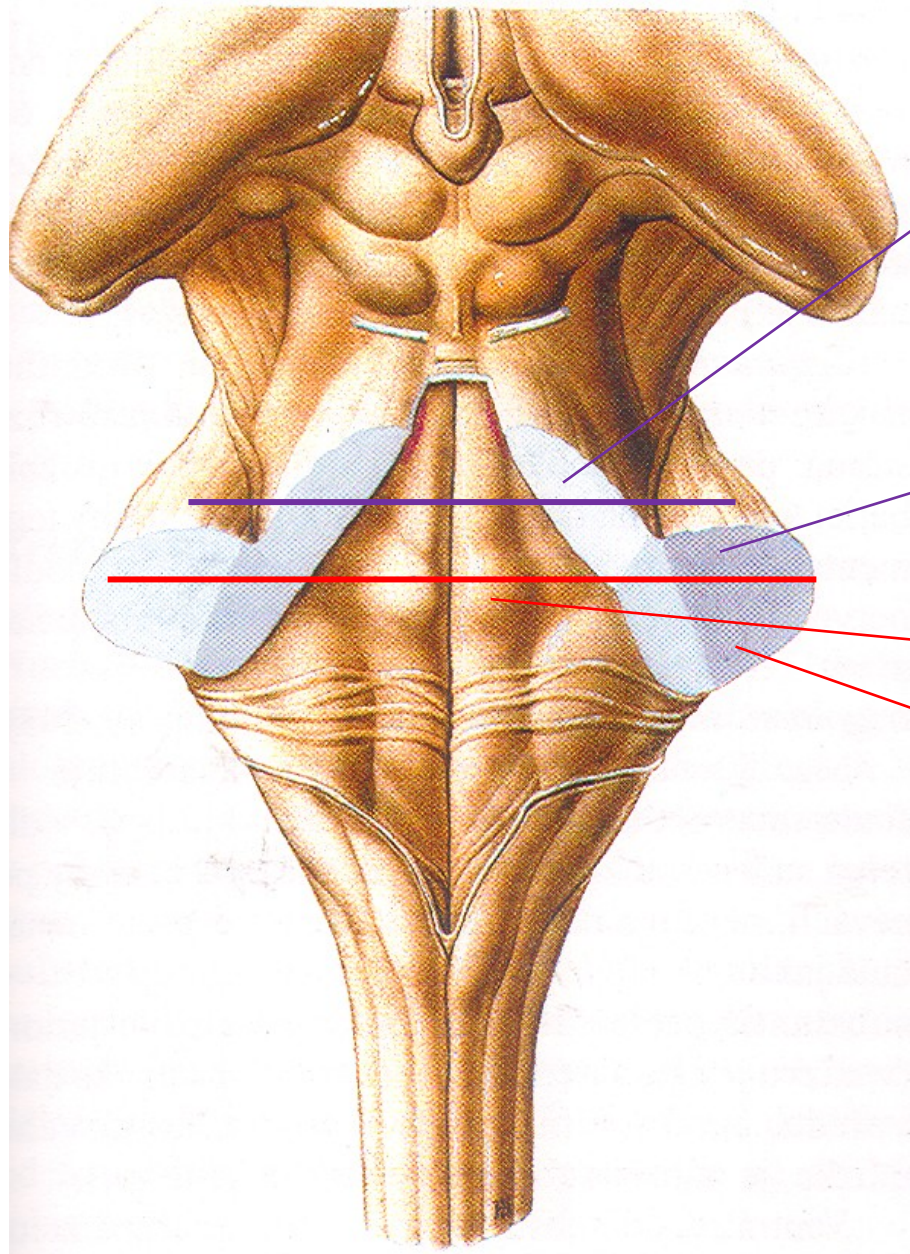
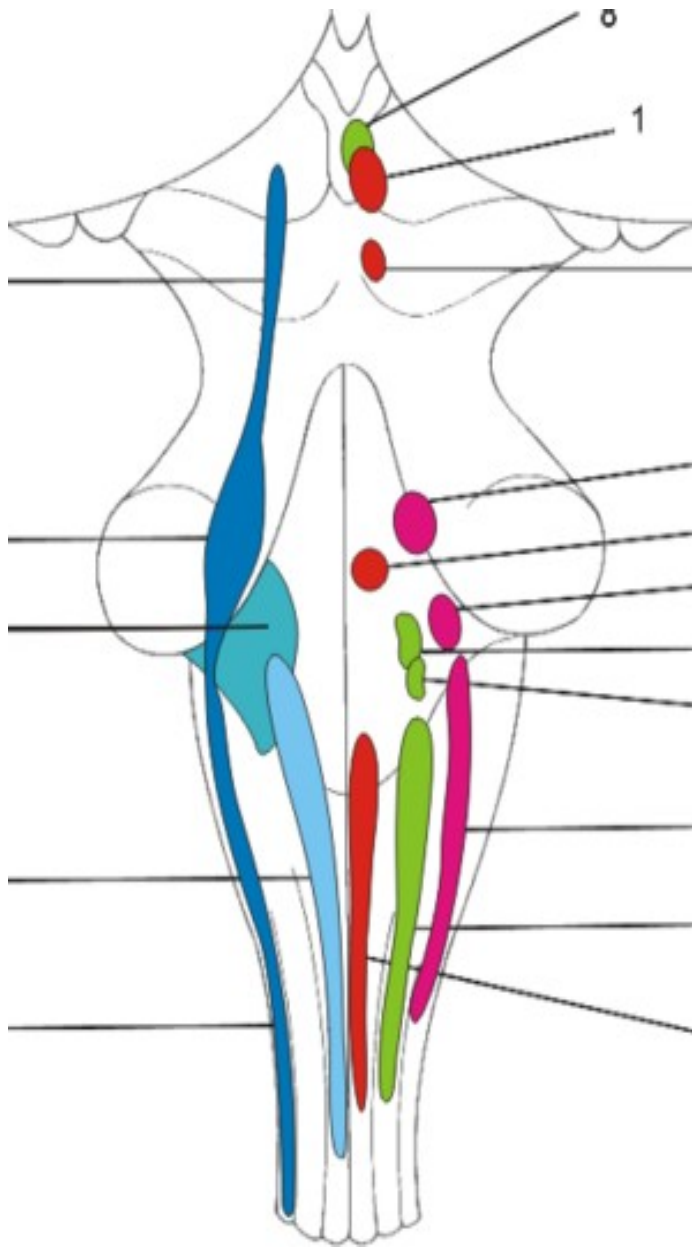
# Pons Varoli

# VENTRÁLNÍ STRANA PONS VAROLI



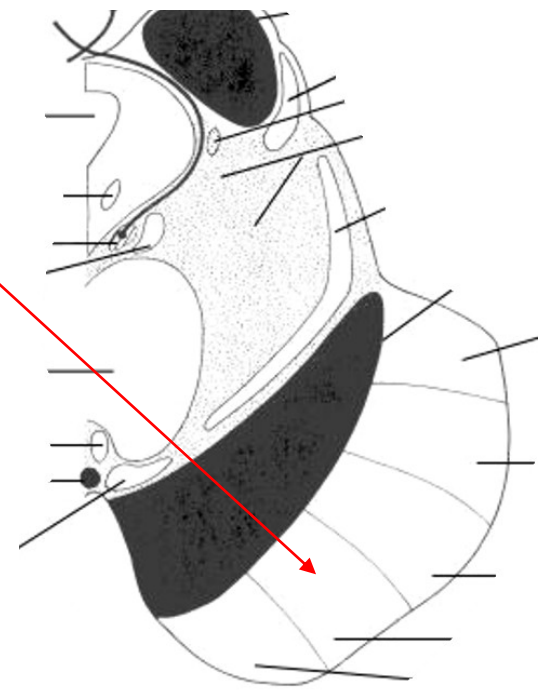
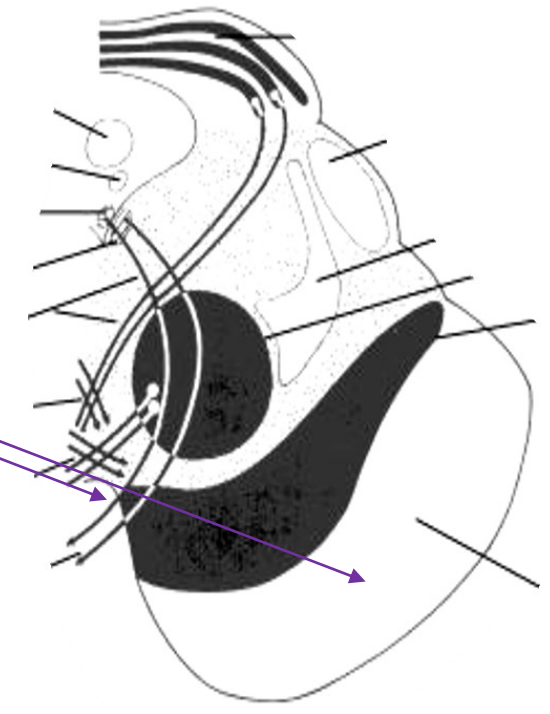
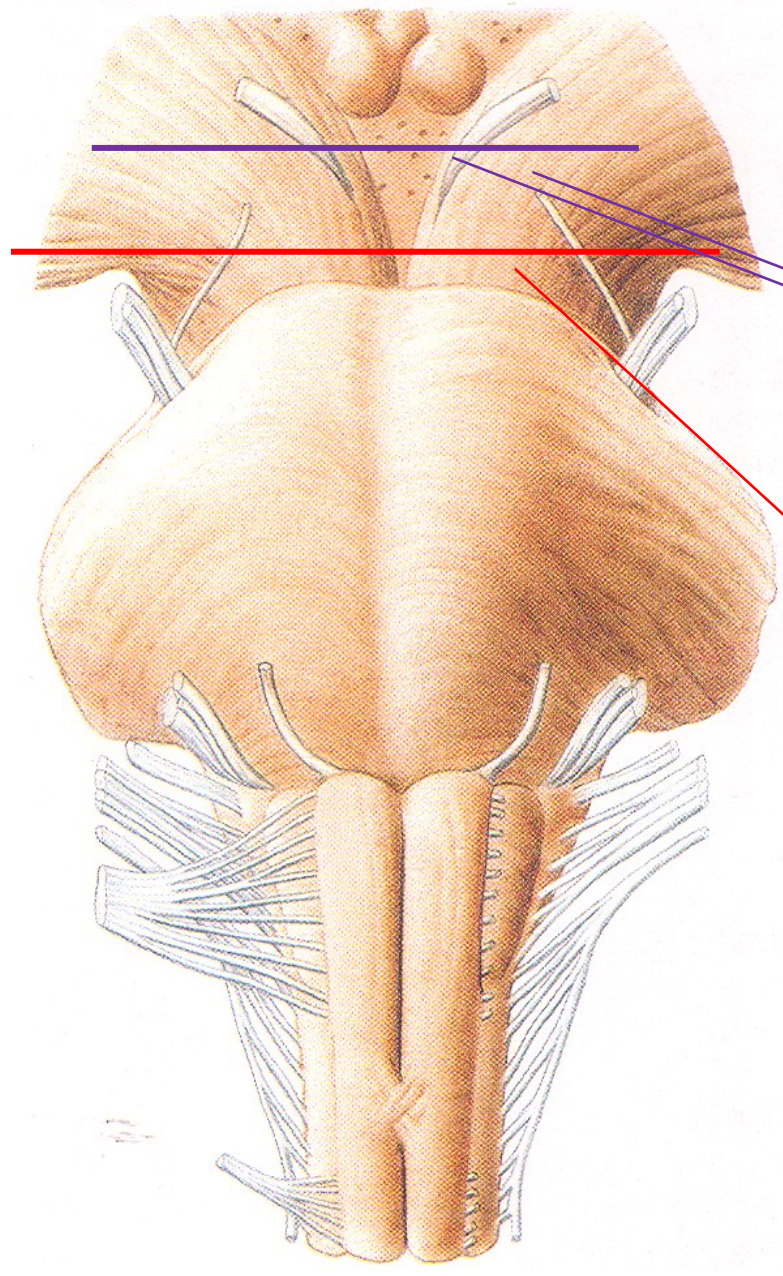
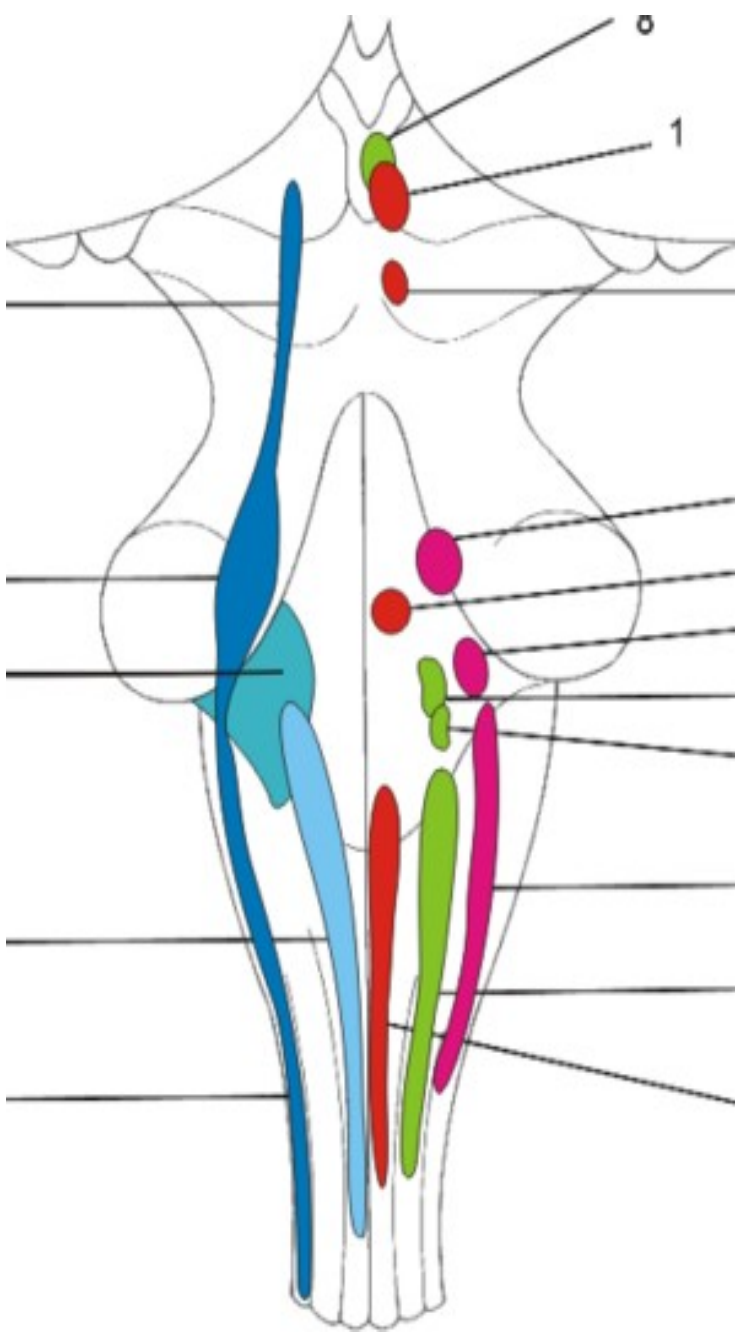


# DORSÁLNÍ STRANA PONS VAROLI





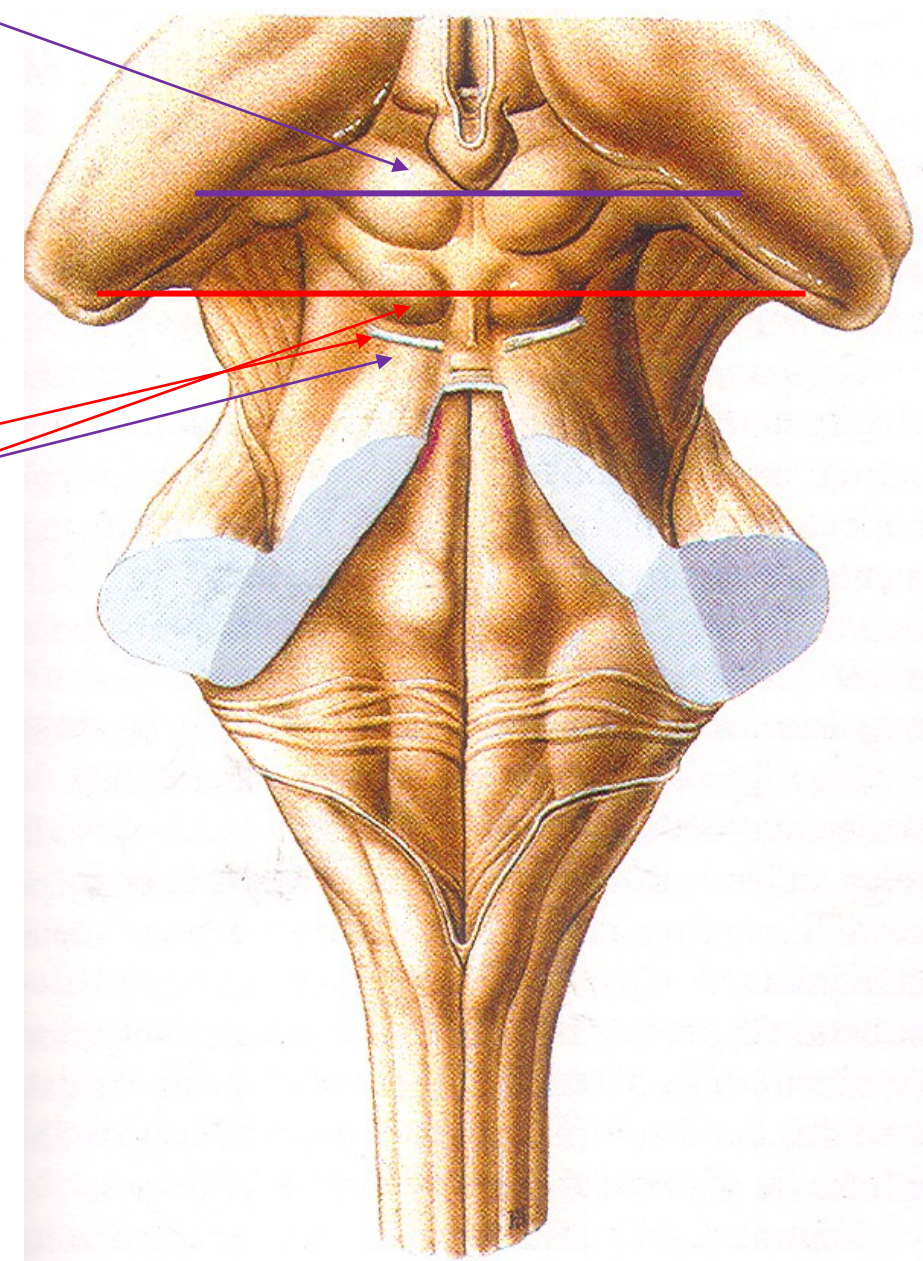
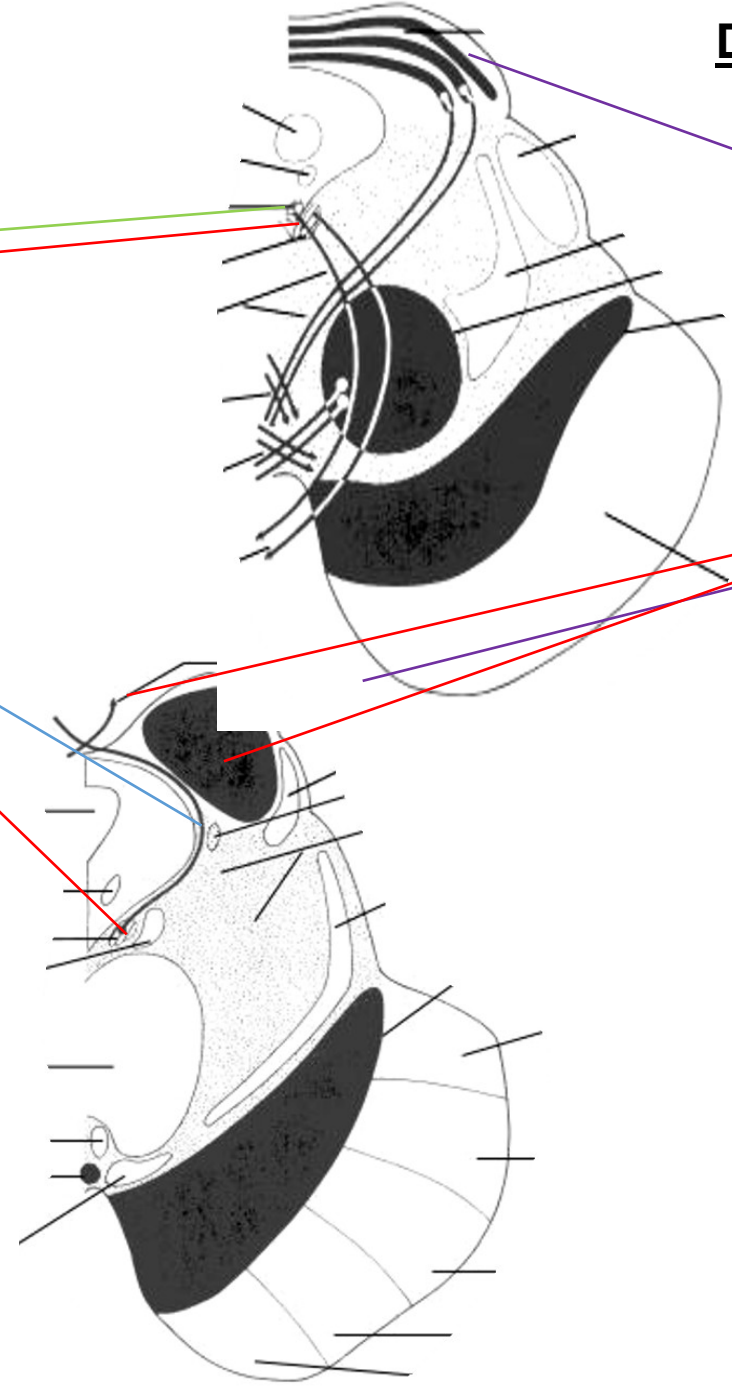
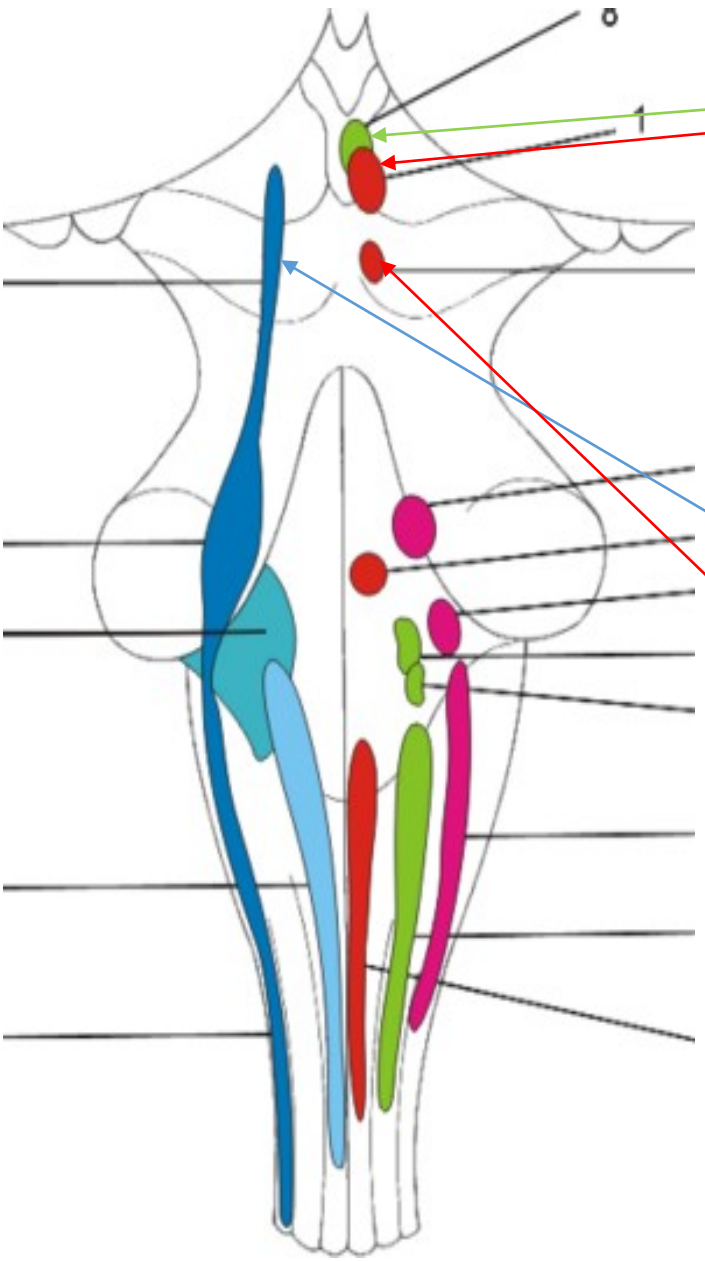
# VENTRÁLNÍ STRANA MESENCEPHALON



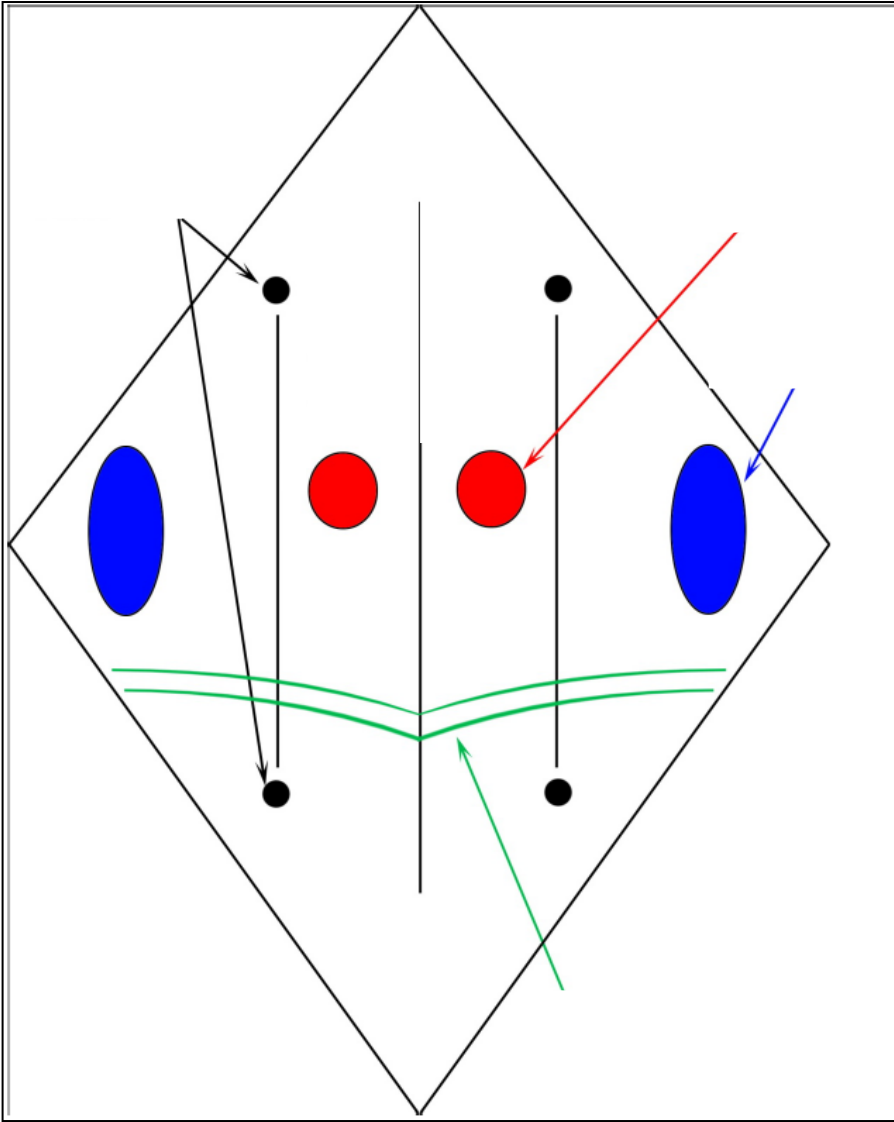
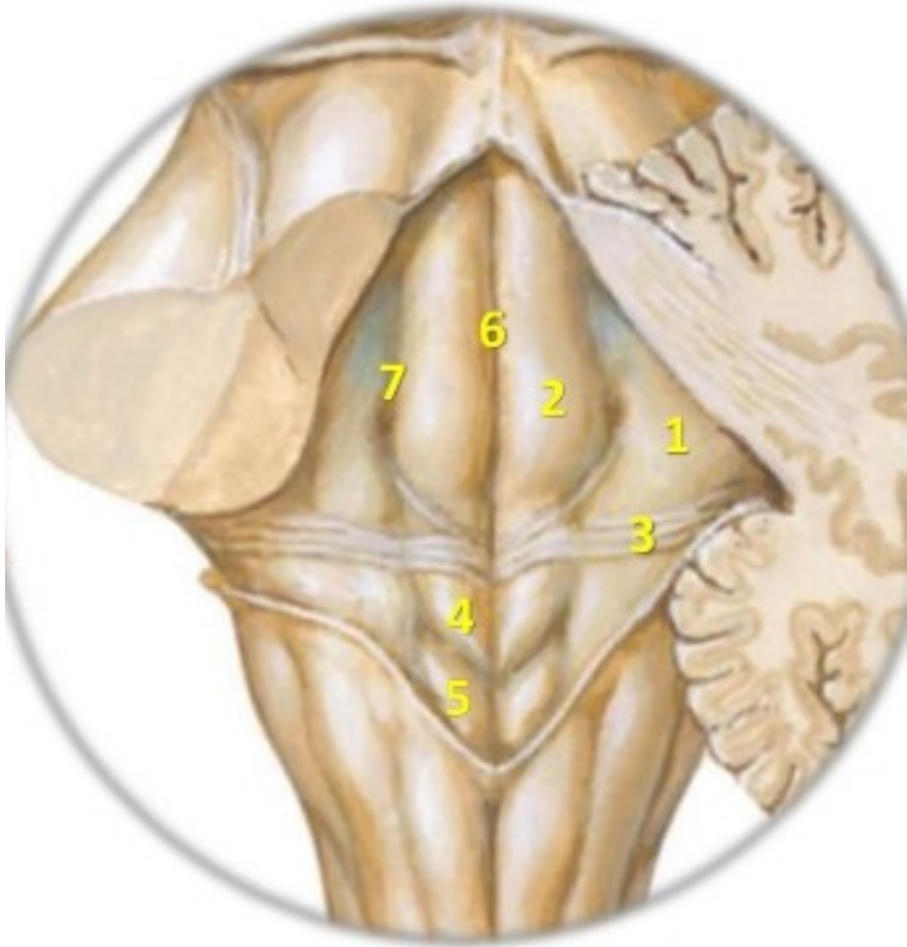


**Mesencephalon**

**DORSÁLNÍ STRANA MESENCEPHALON**

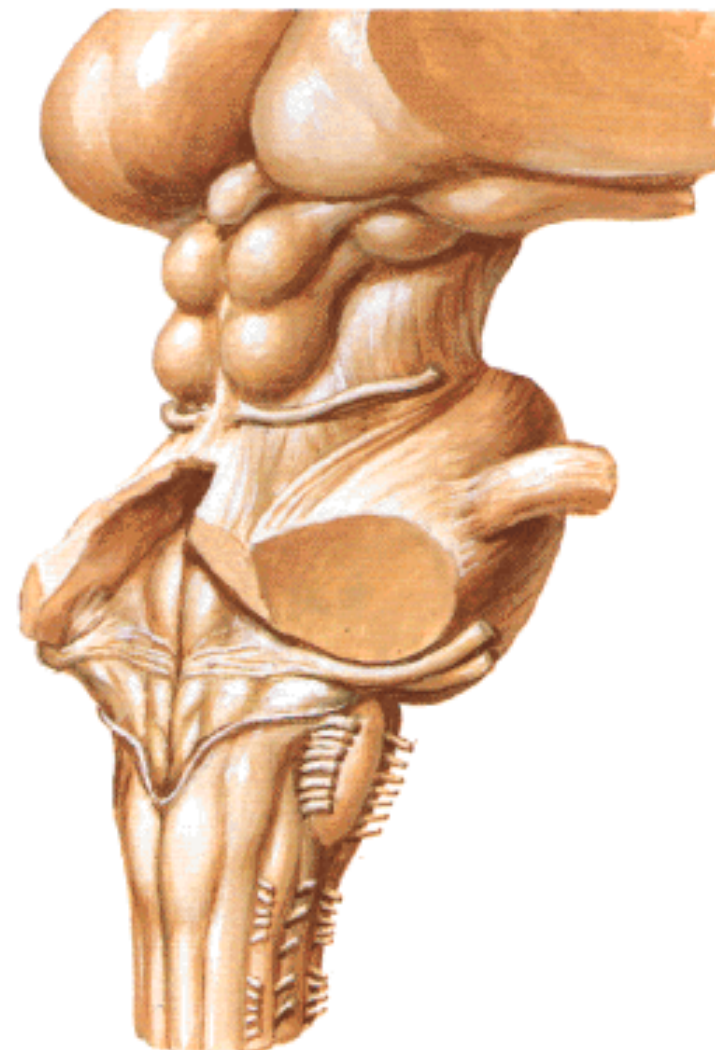
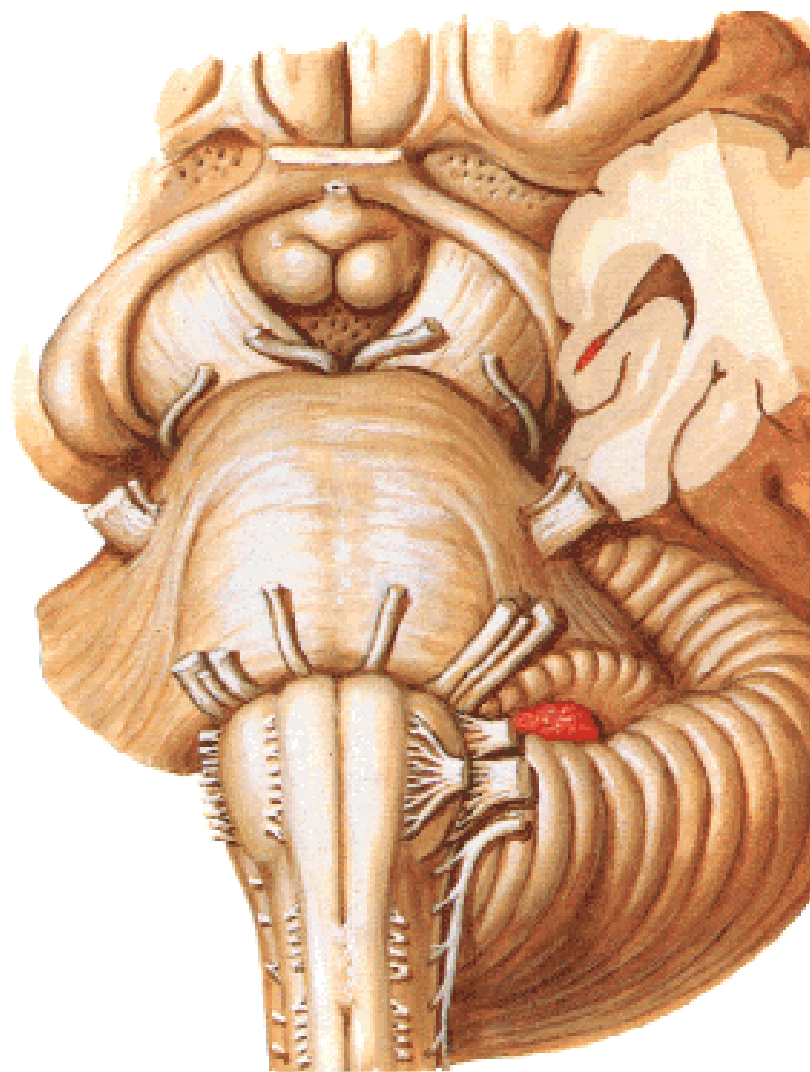


**Fossa rhomboidea**



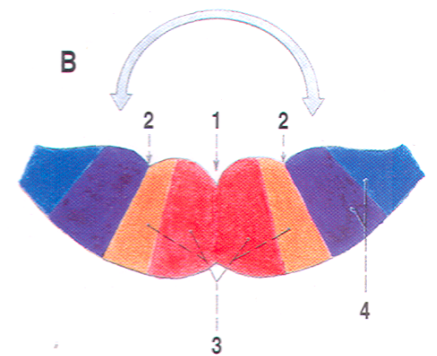
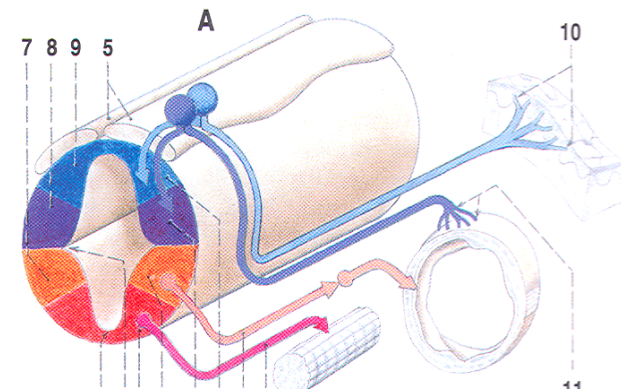
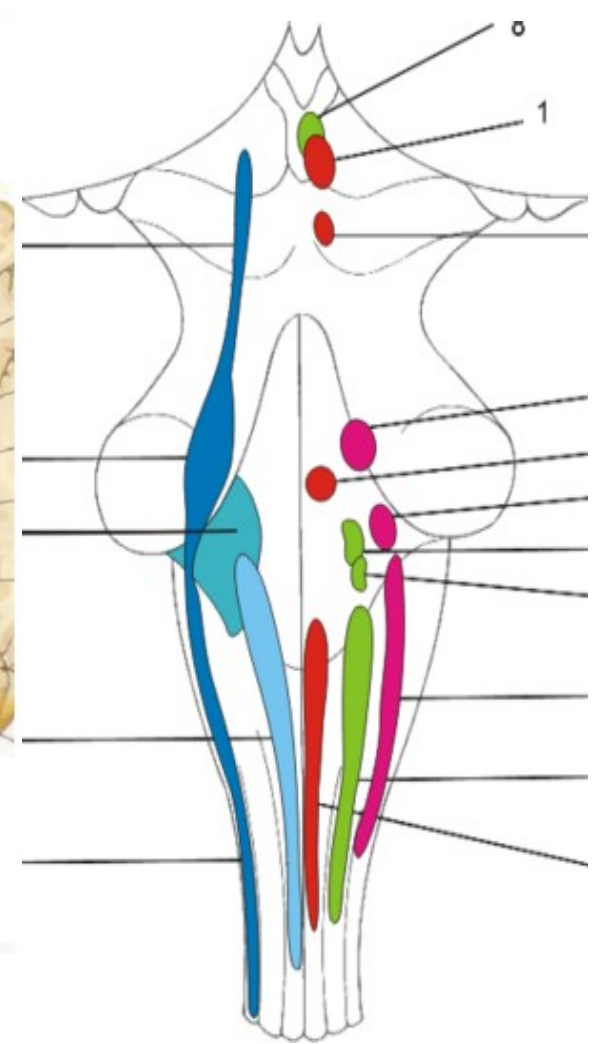
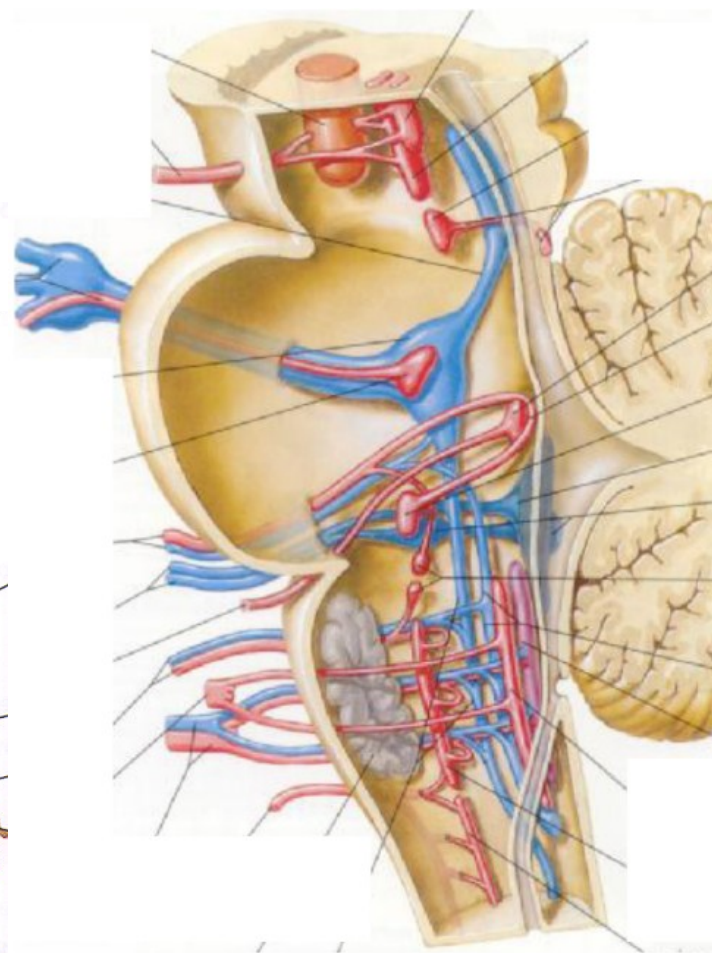
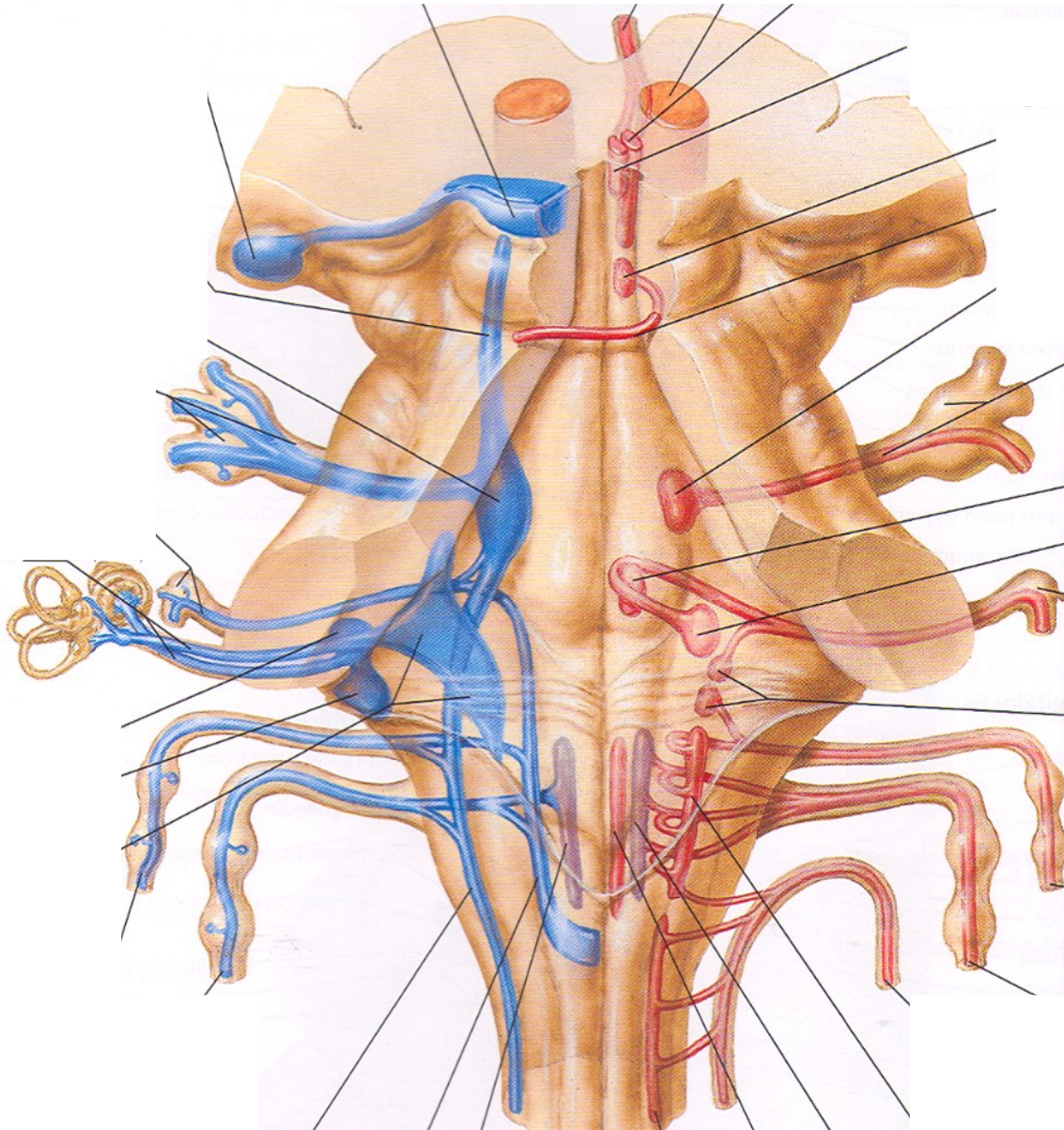


# VÝSTUPY HLAVOVÝCH NERVŮ Z MOZKU

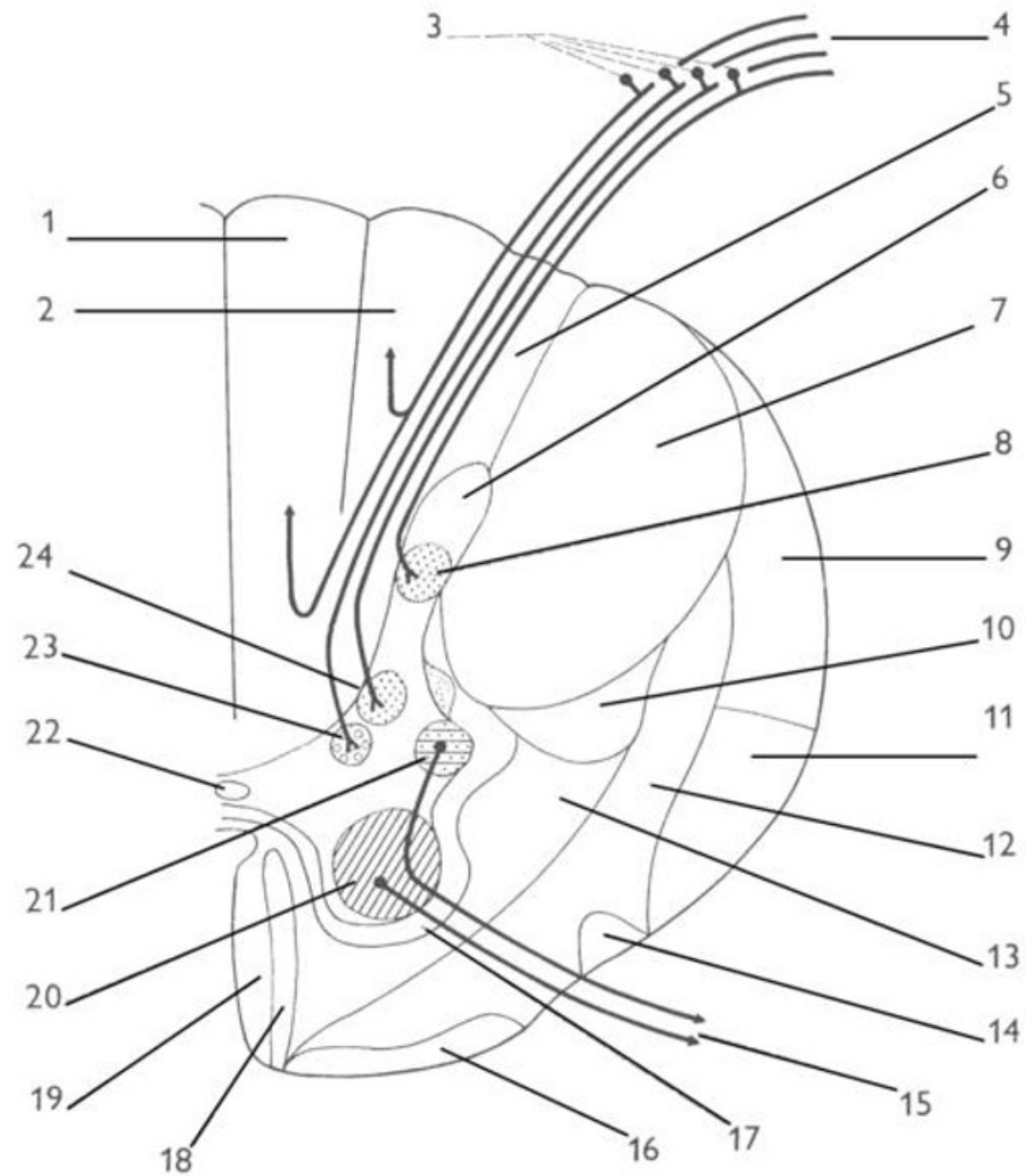


# JÁDRA HLAVOVÝCH NERVŮ III – XII

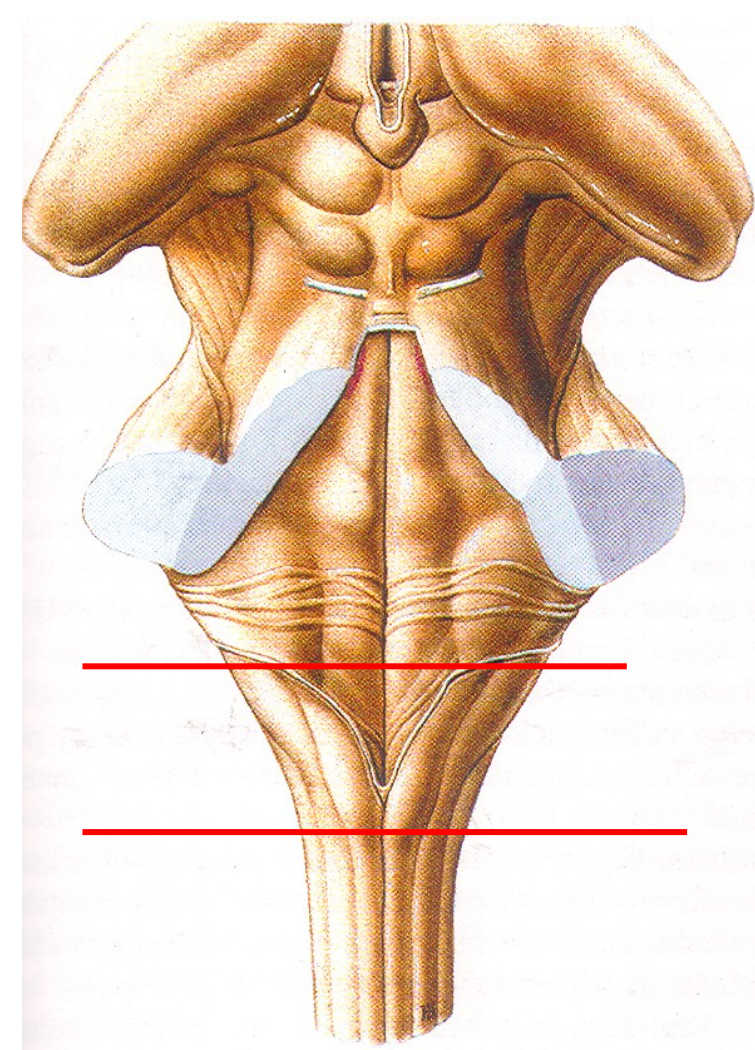
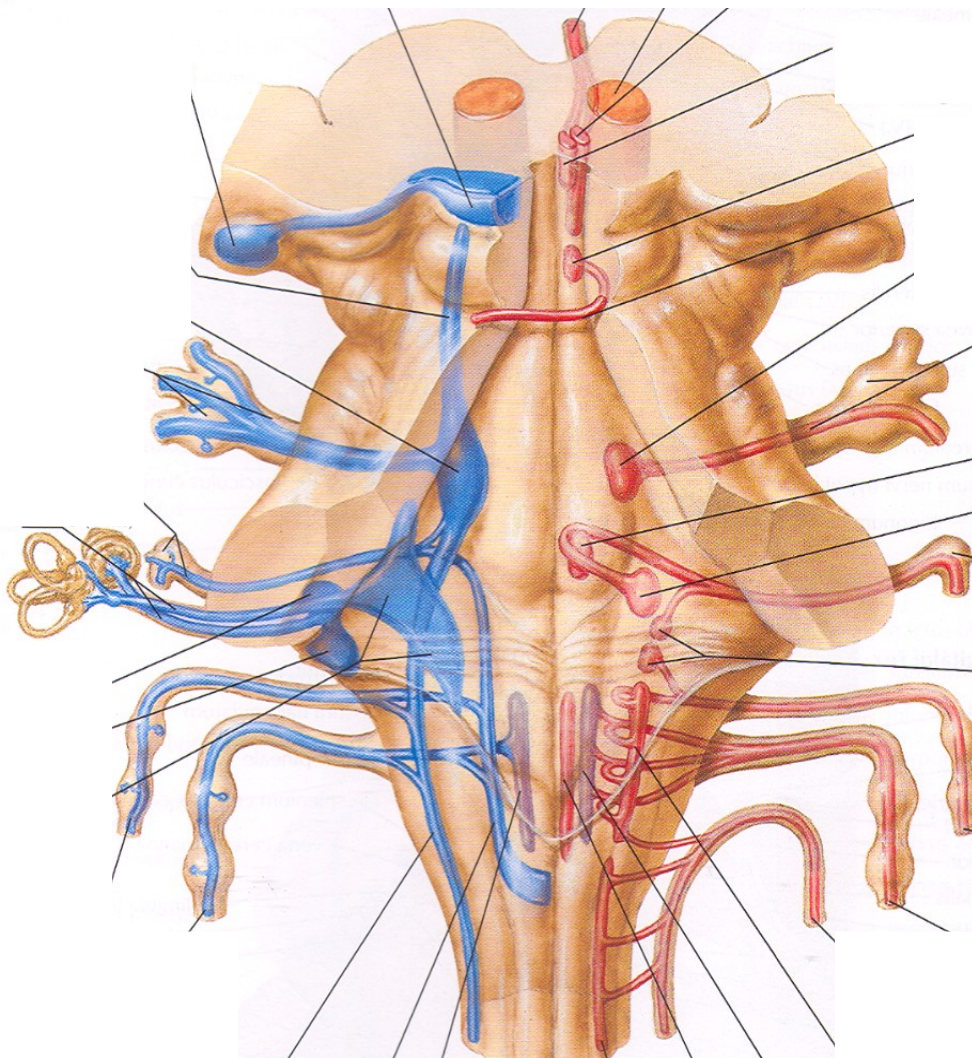
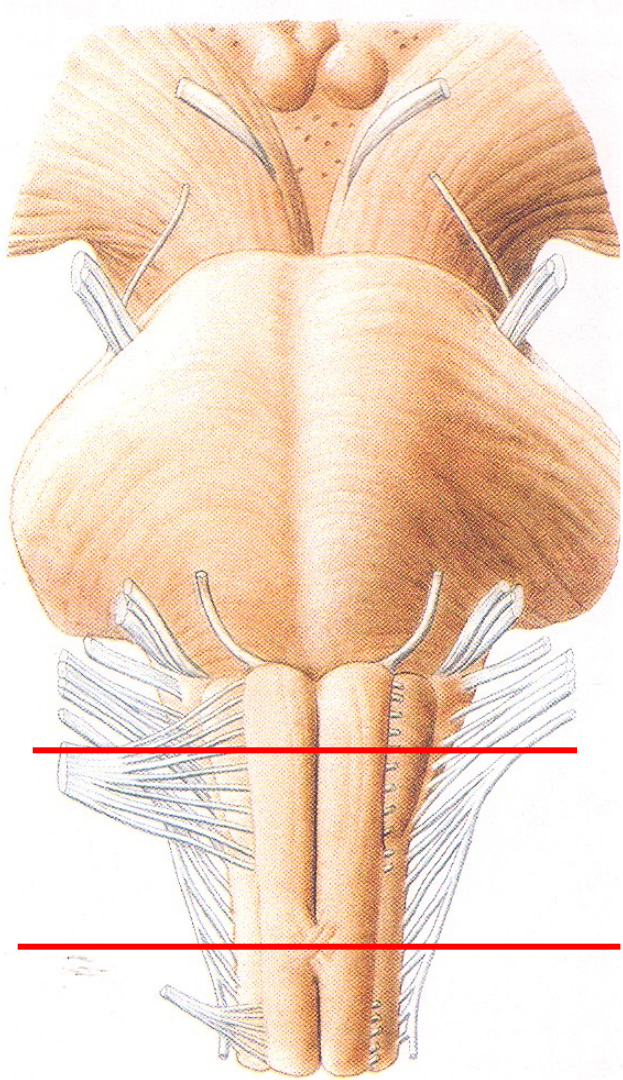
ve kmeni mozgovém - pod spodinou IV. komory





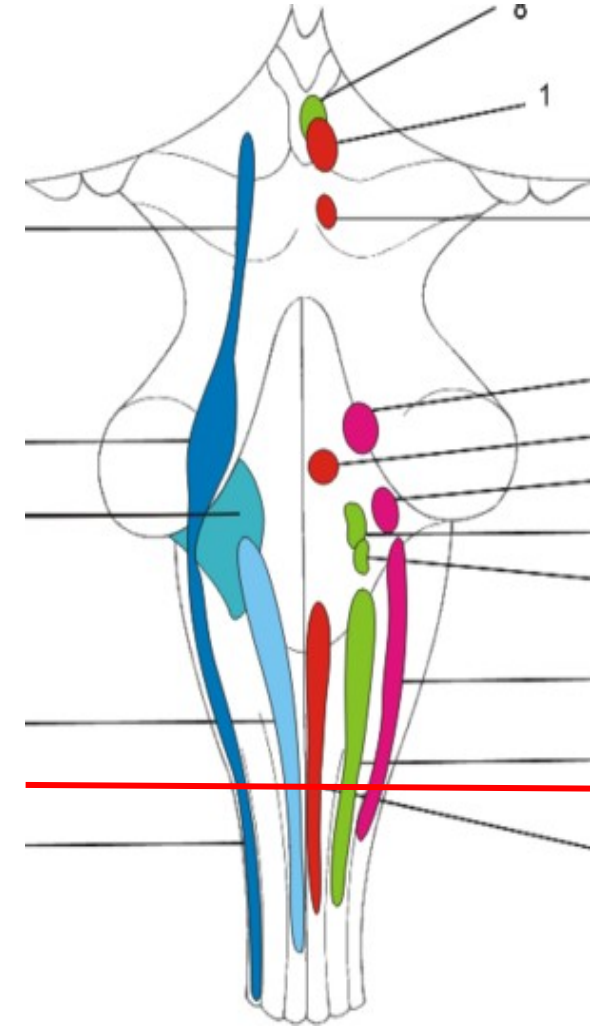
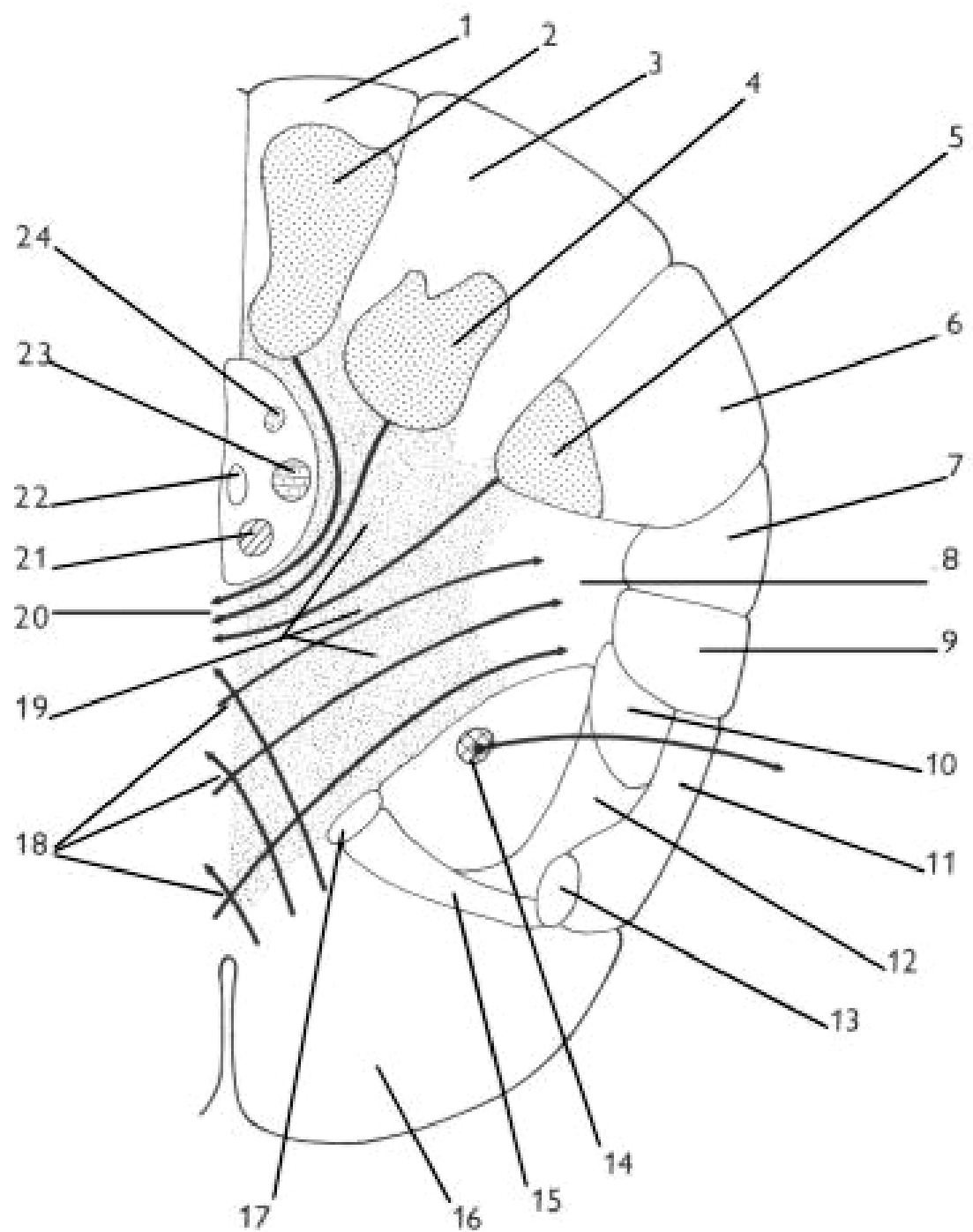


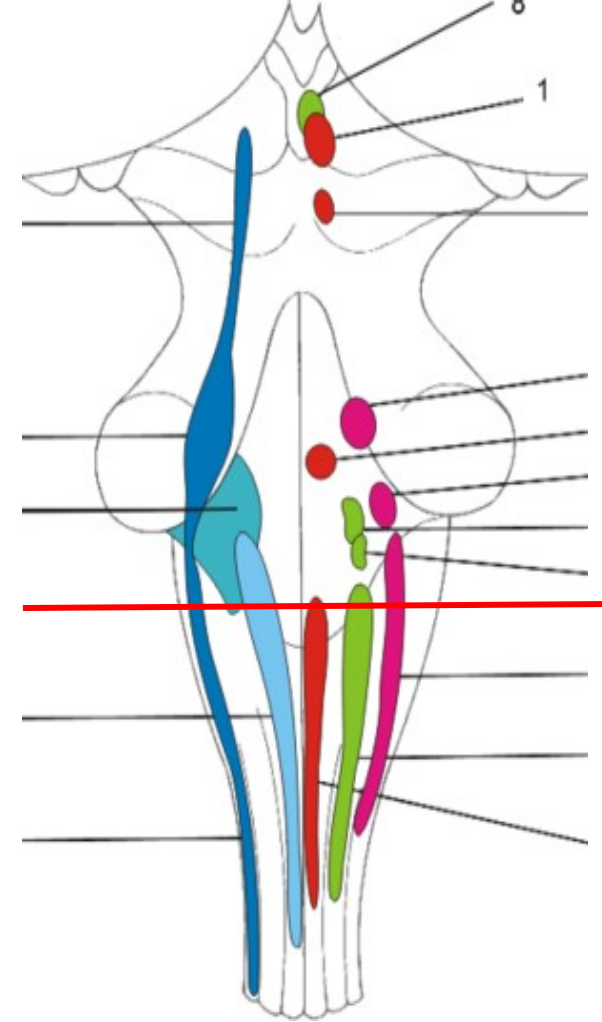
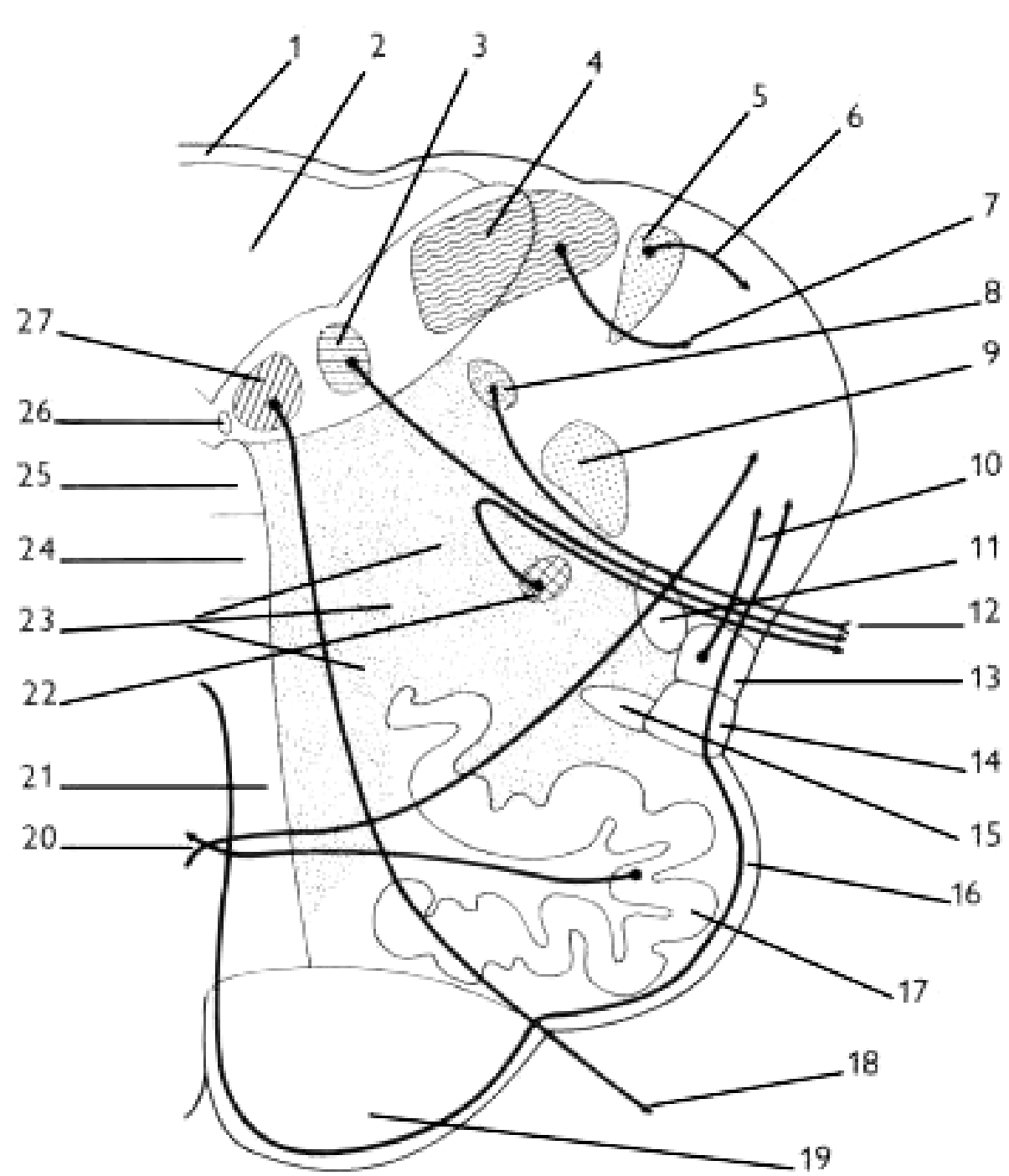




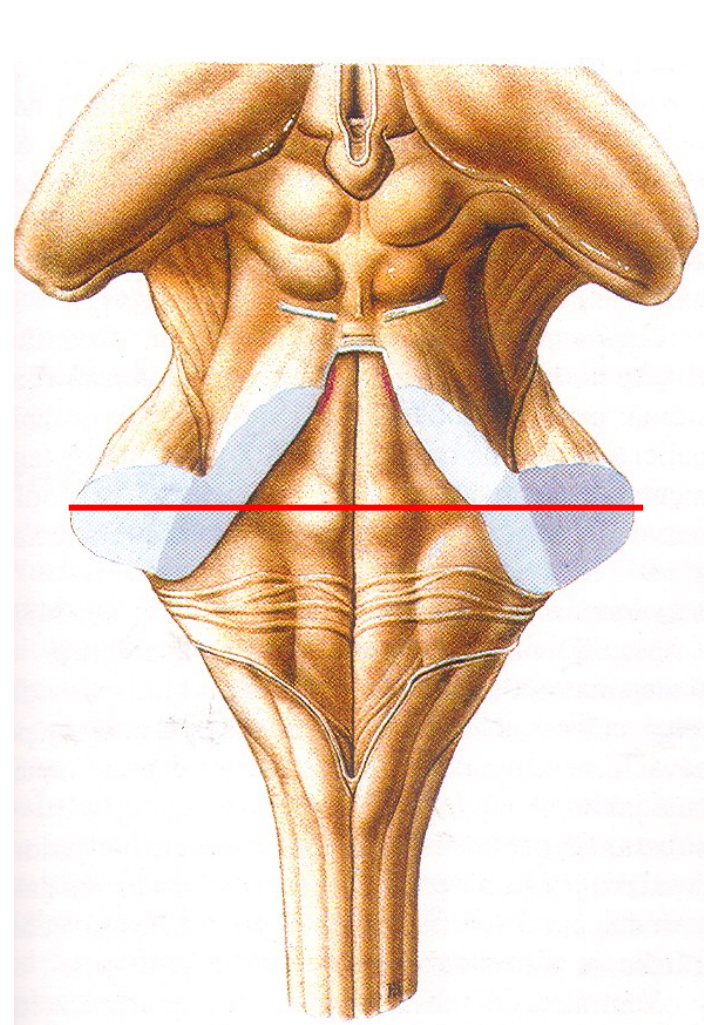
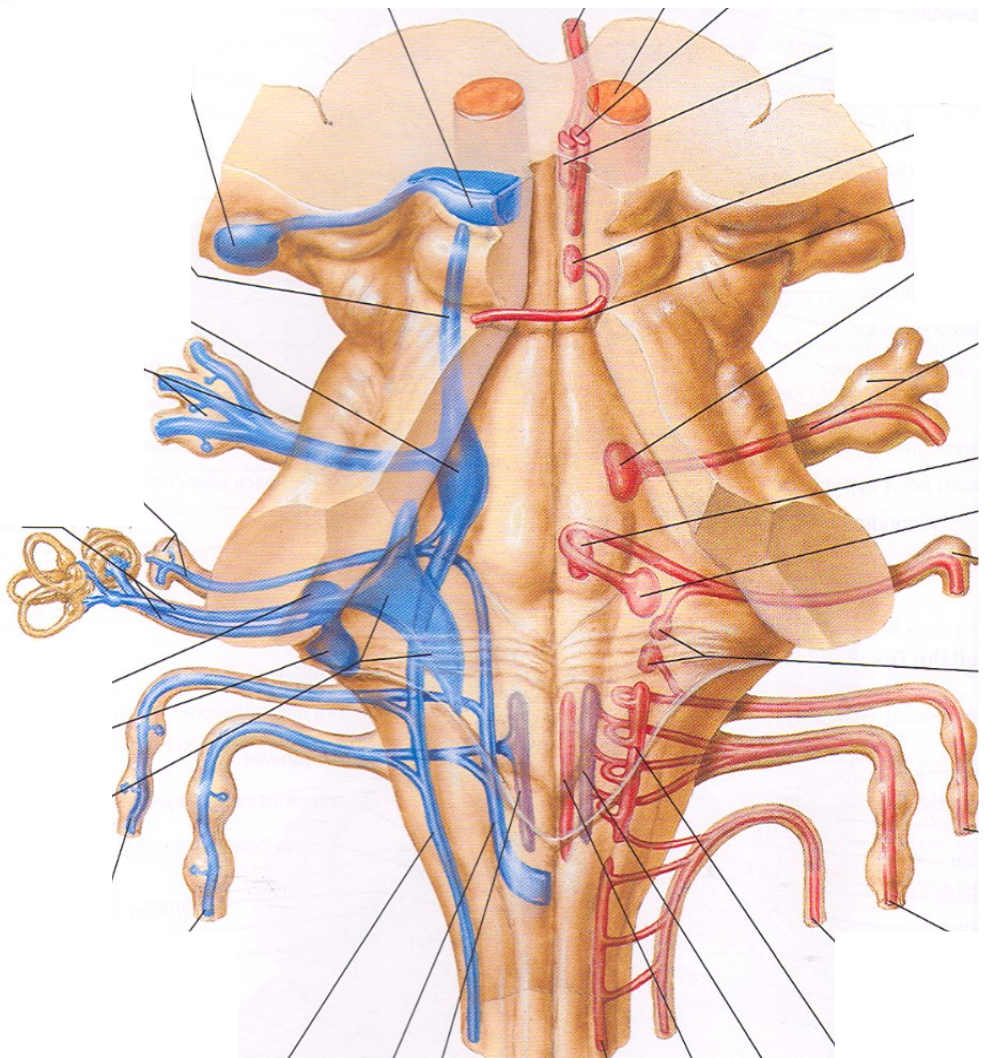
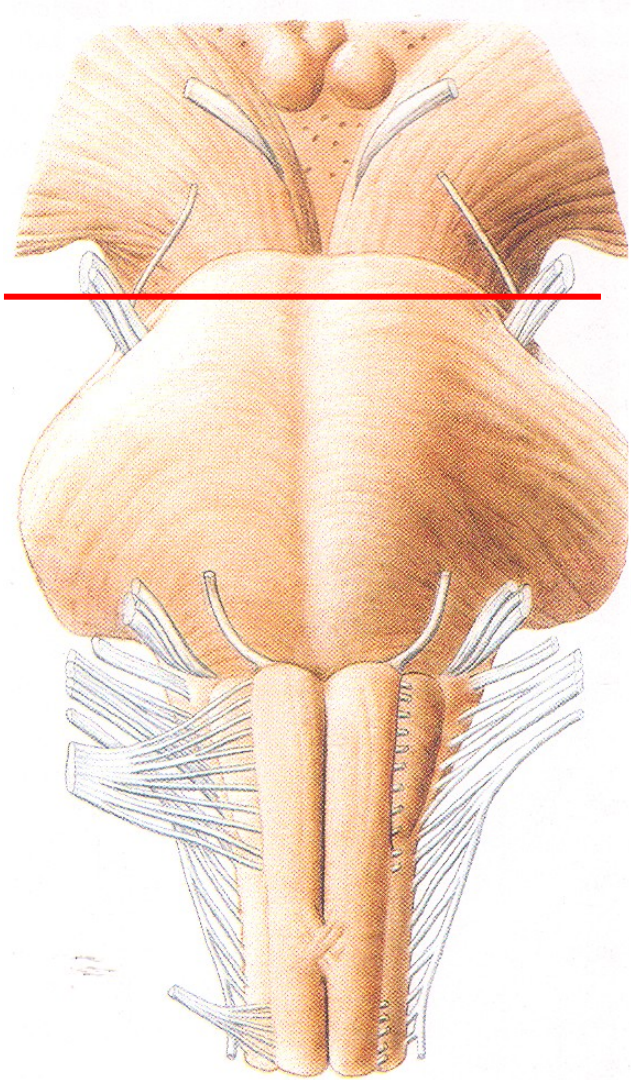
**MEDULLA OBLONGATA**





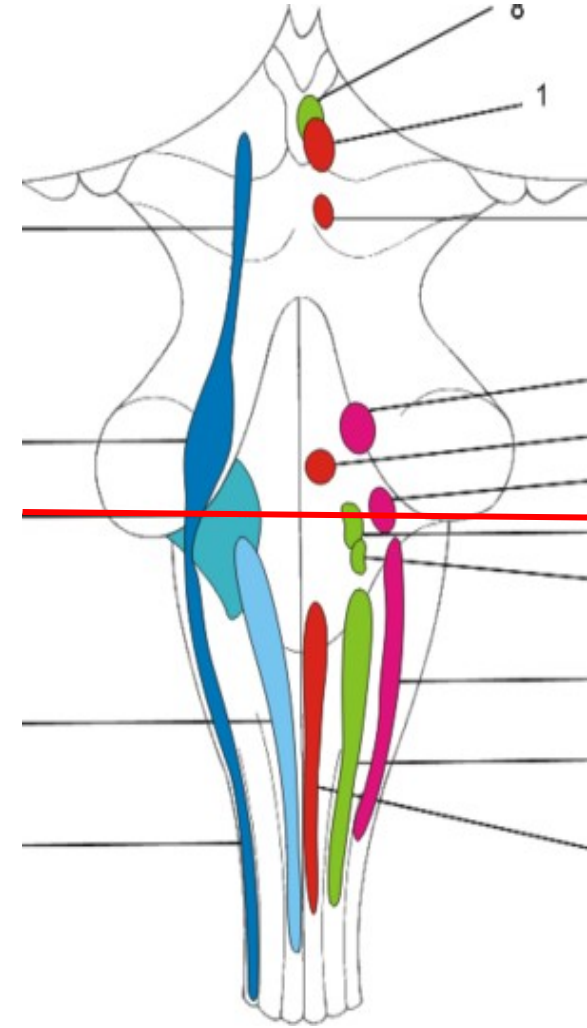
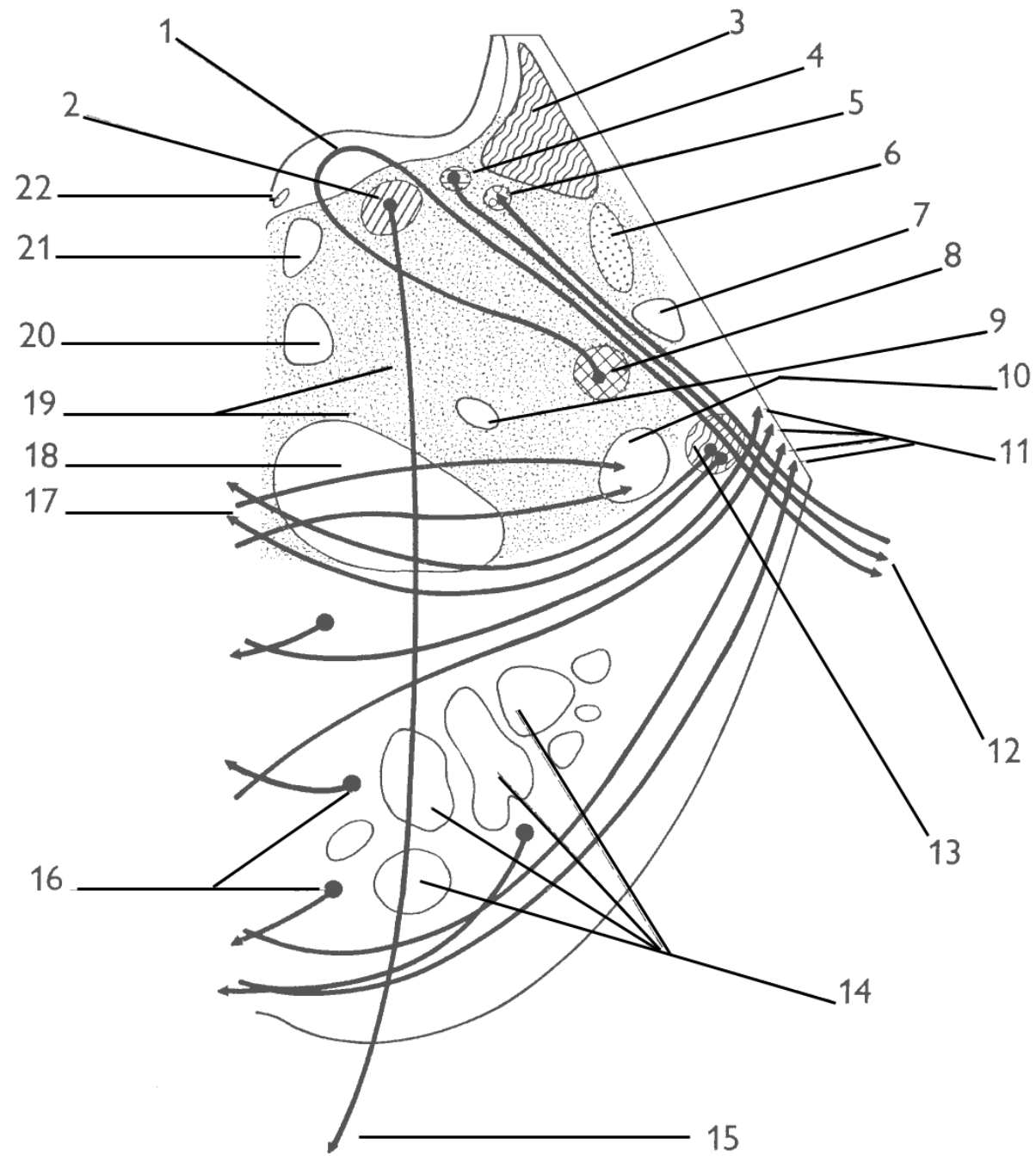




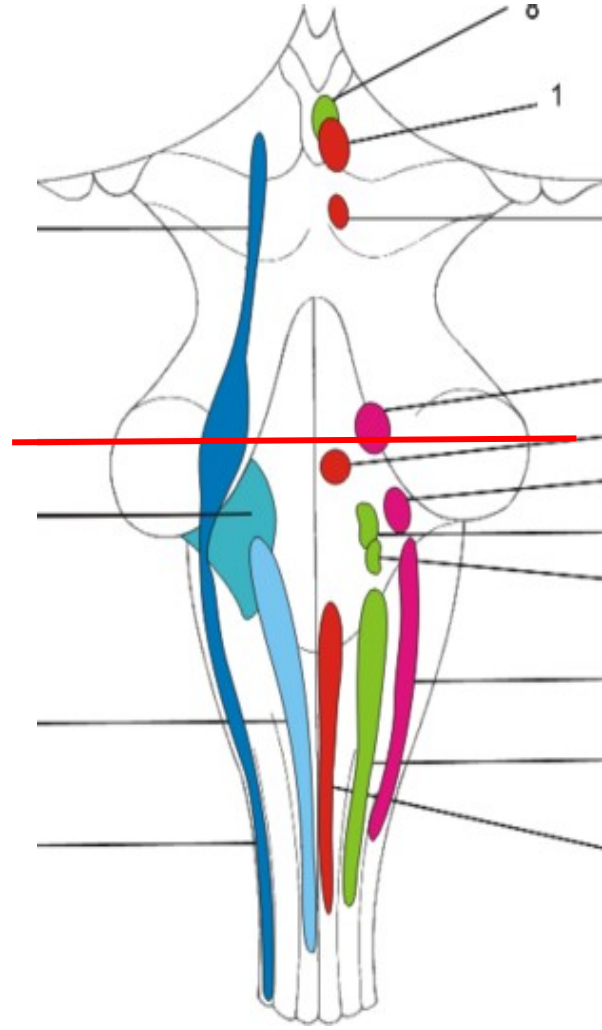
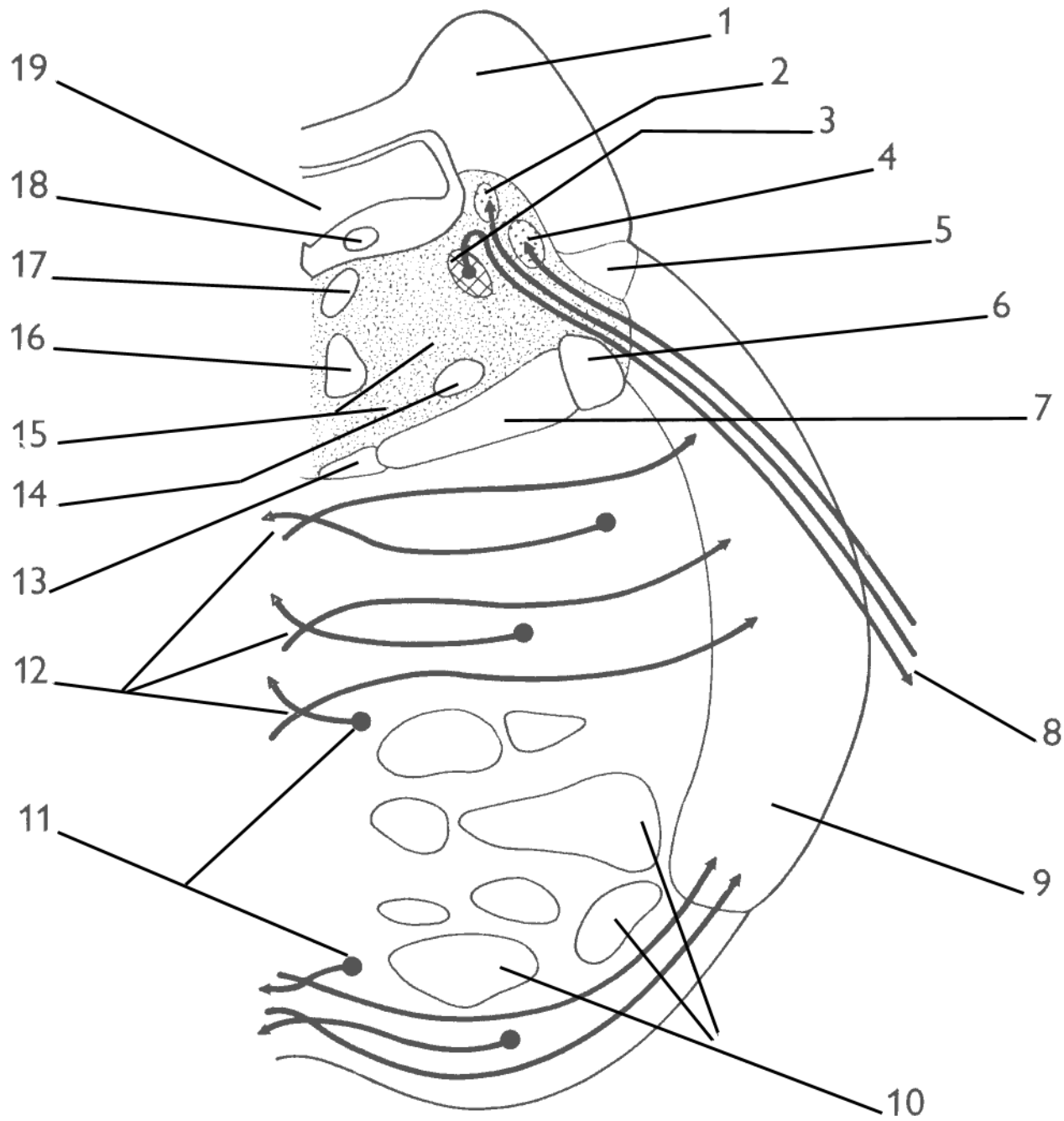


**PONS VAROLI**

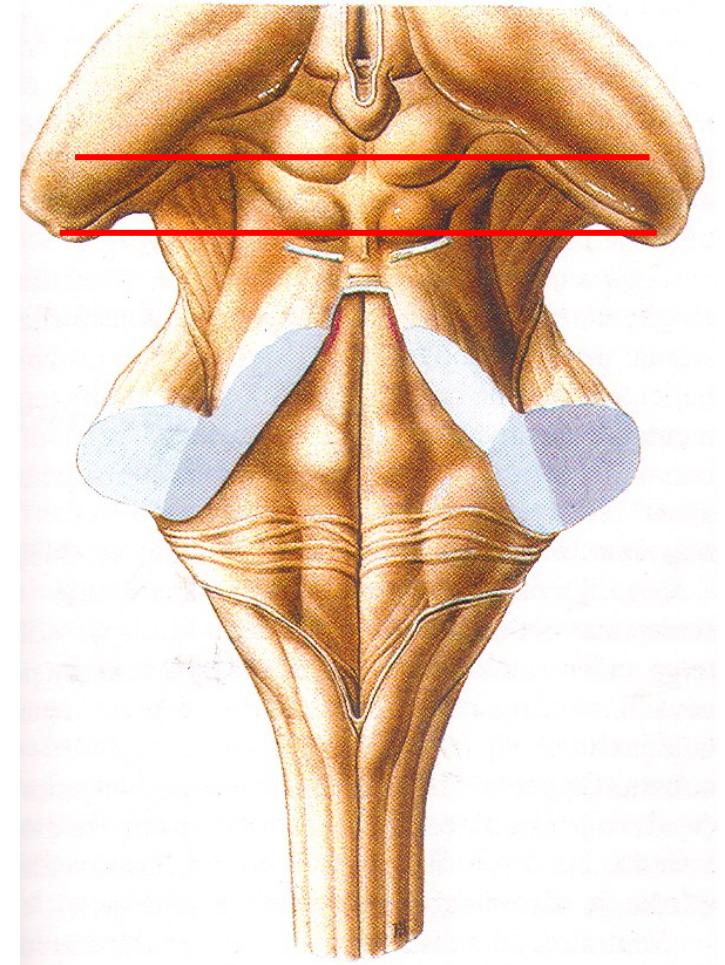
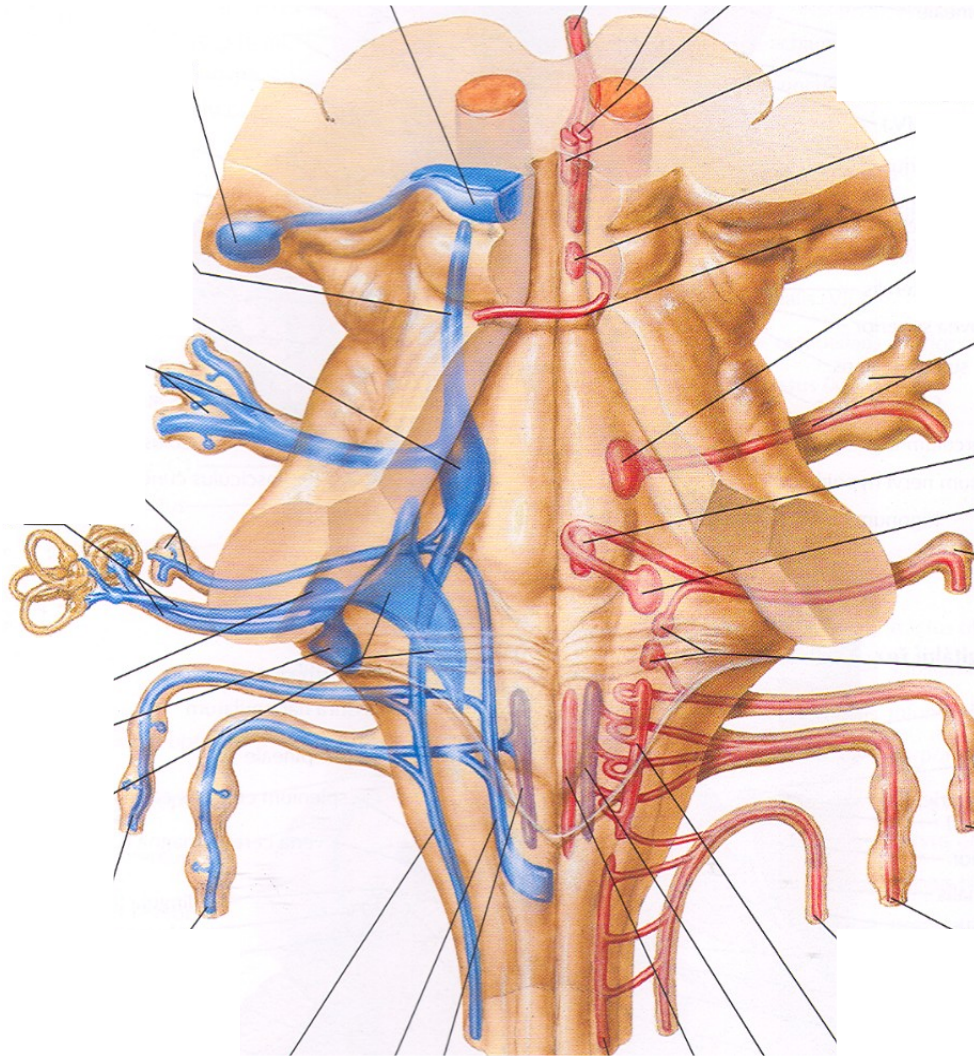
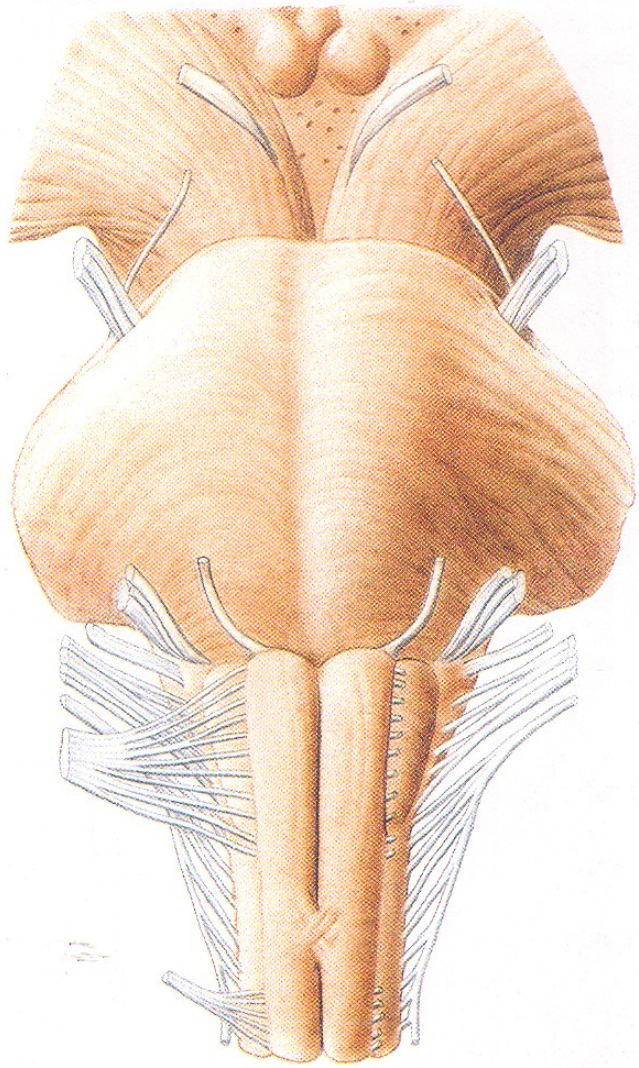






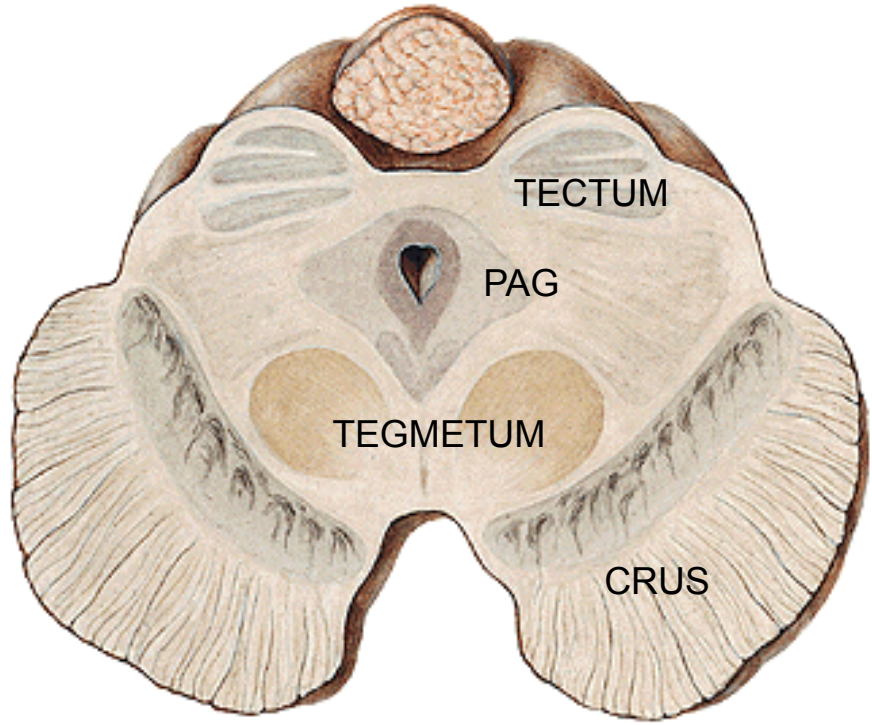




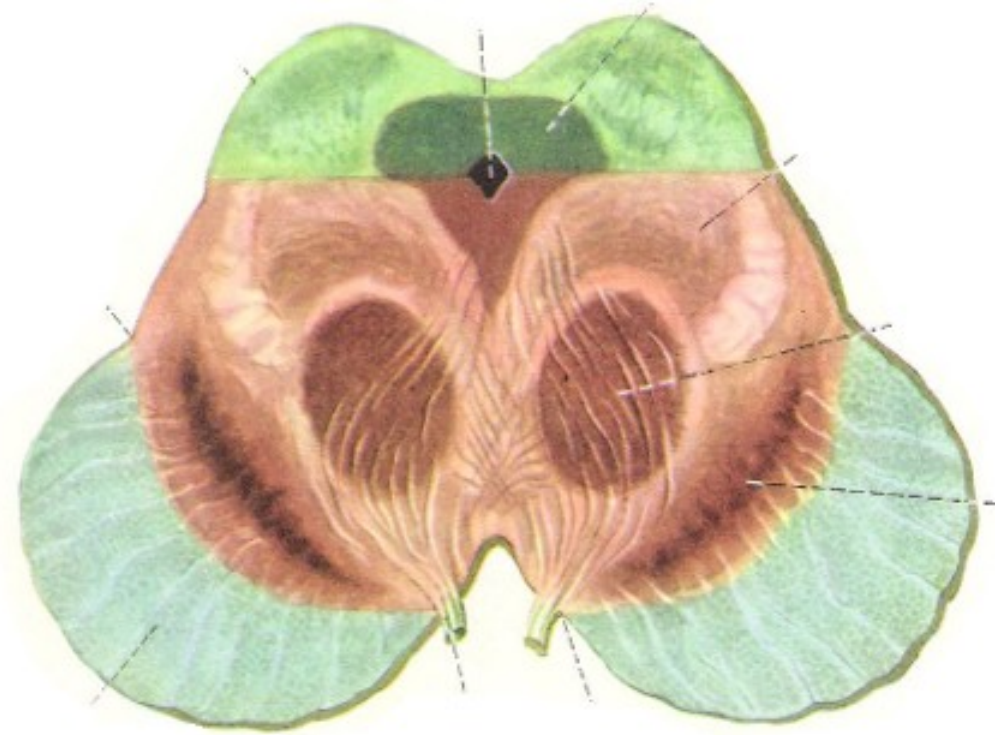


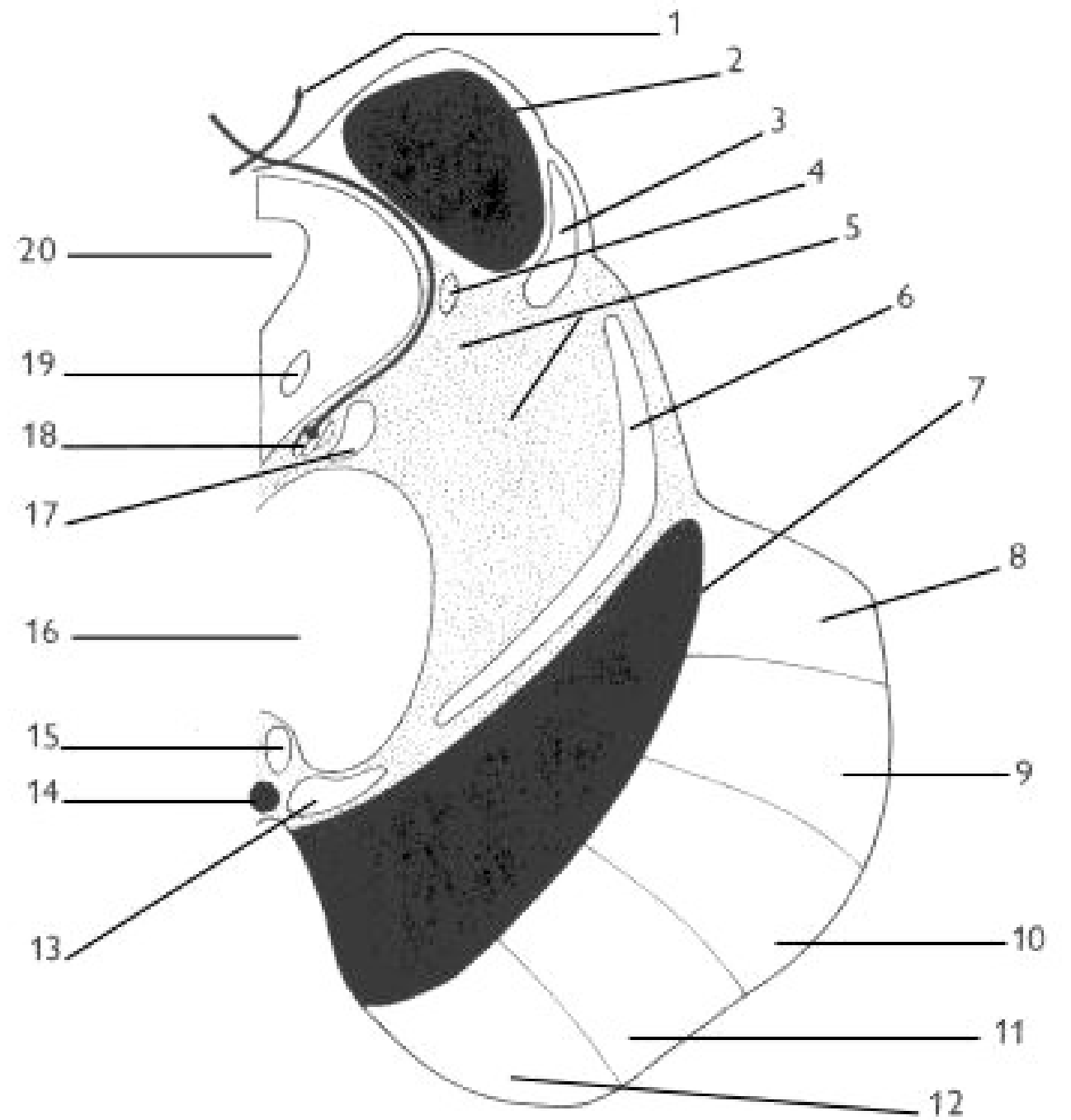
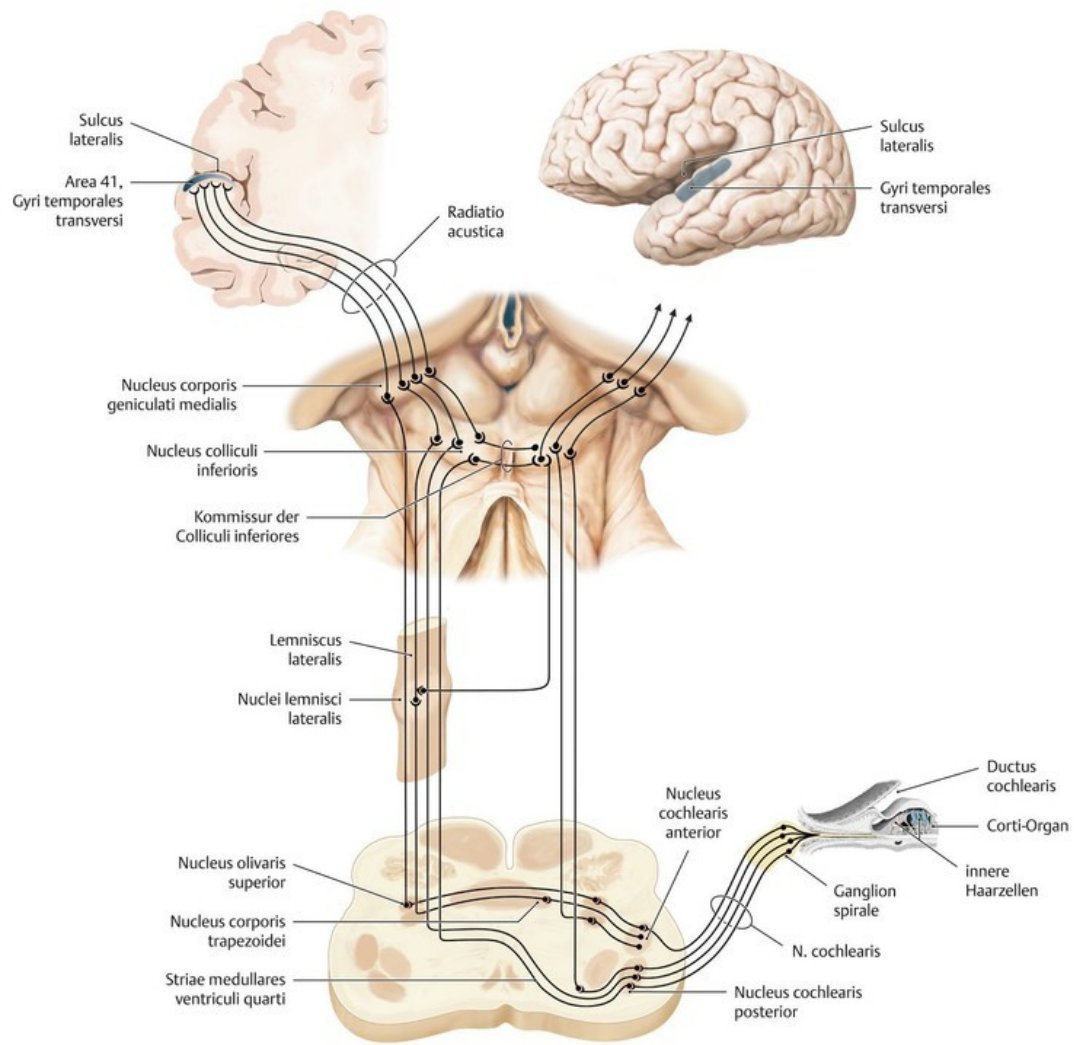
**MESENCEPHALON**



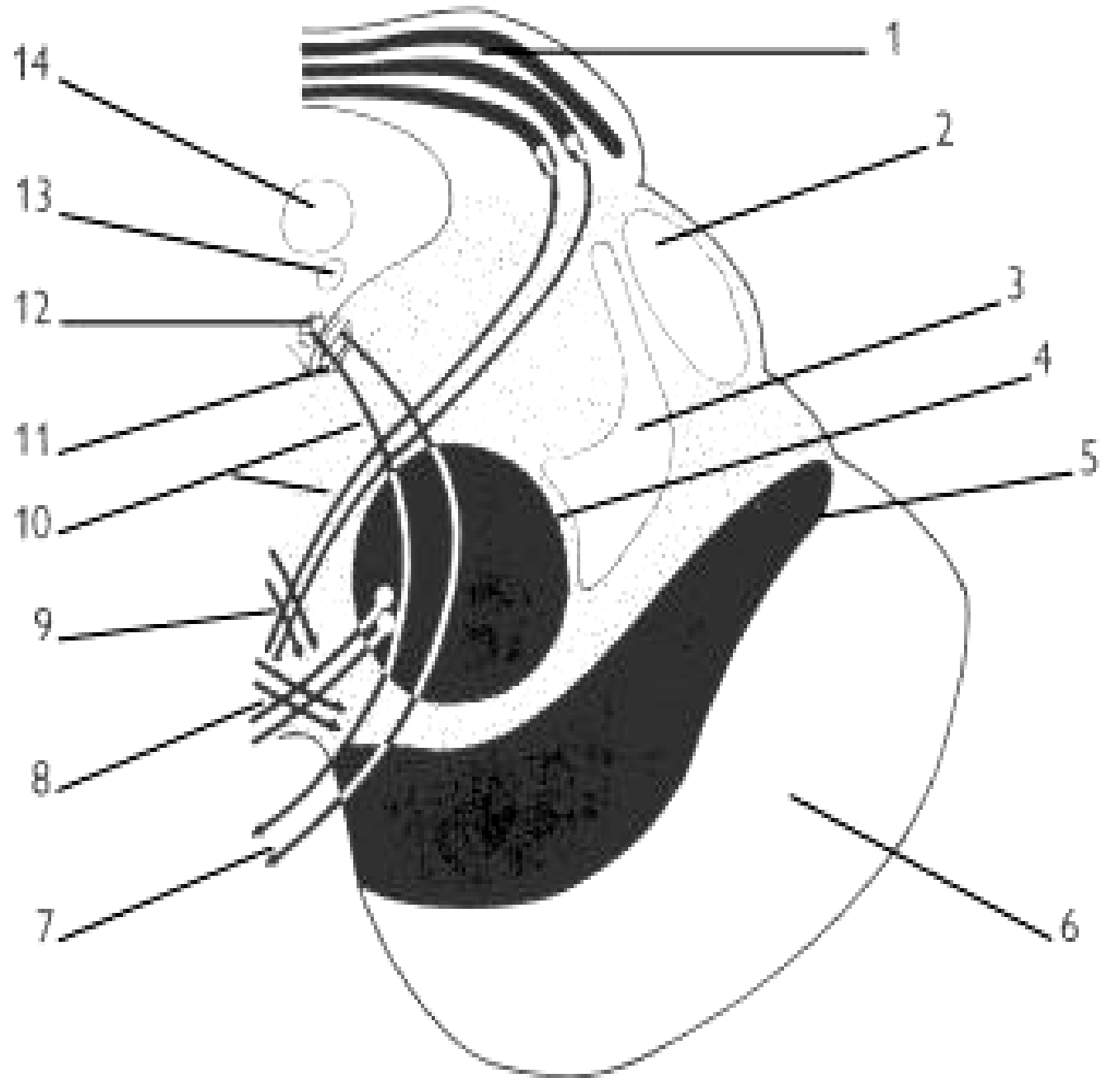
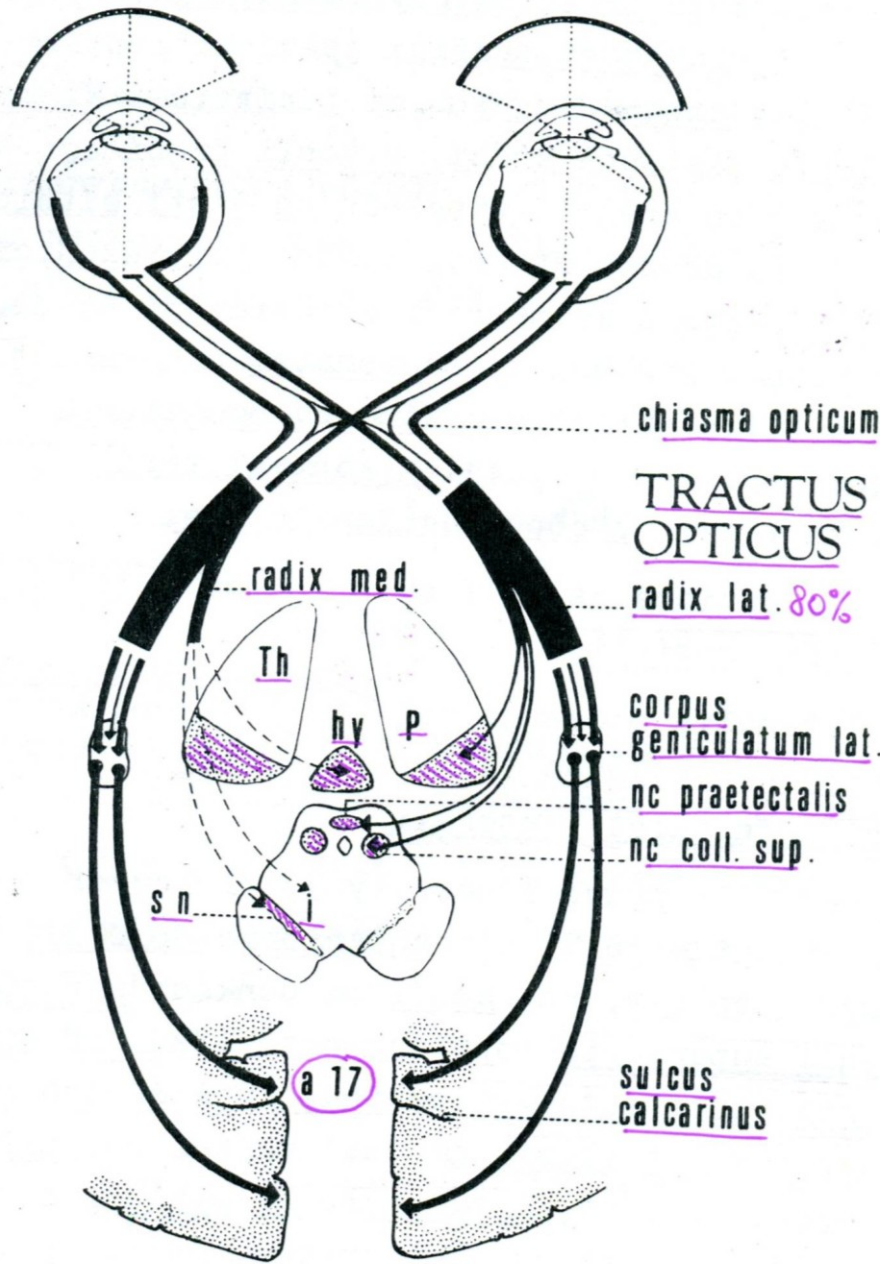


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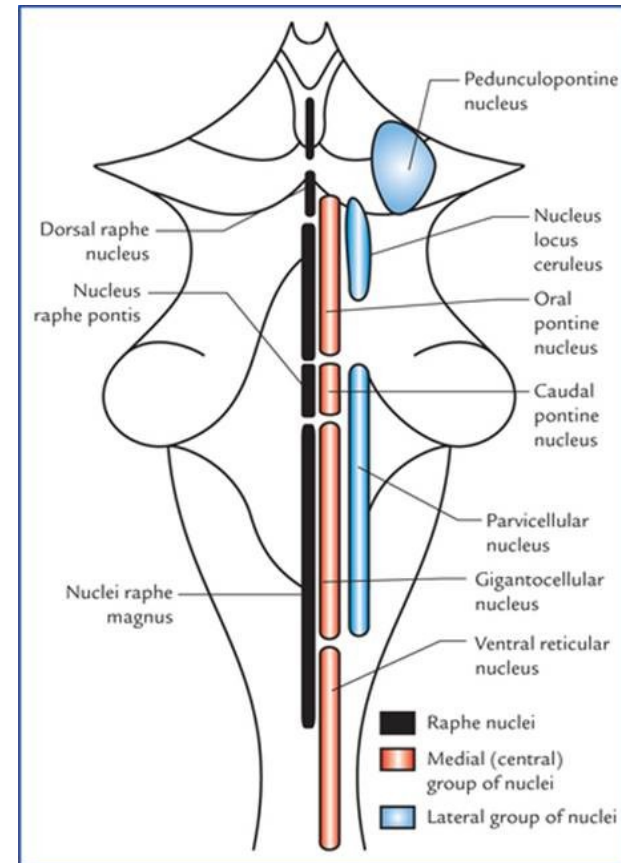
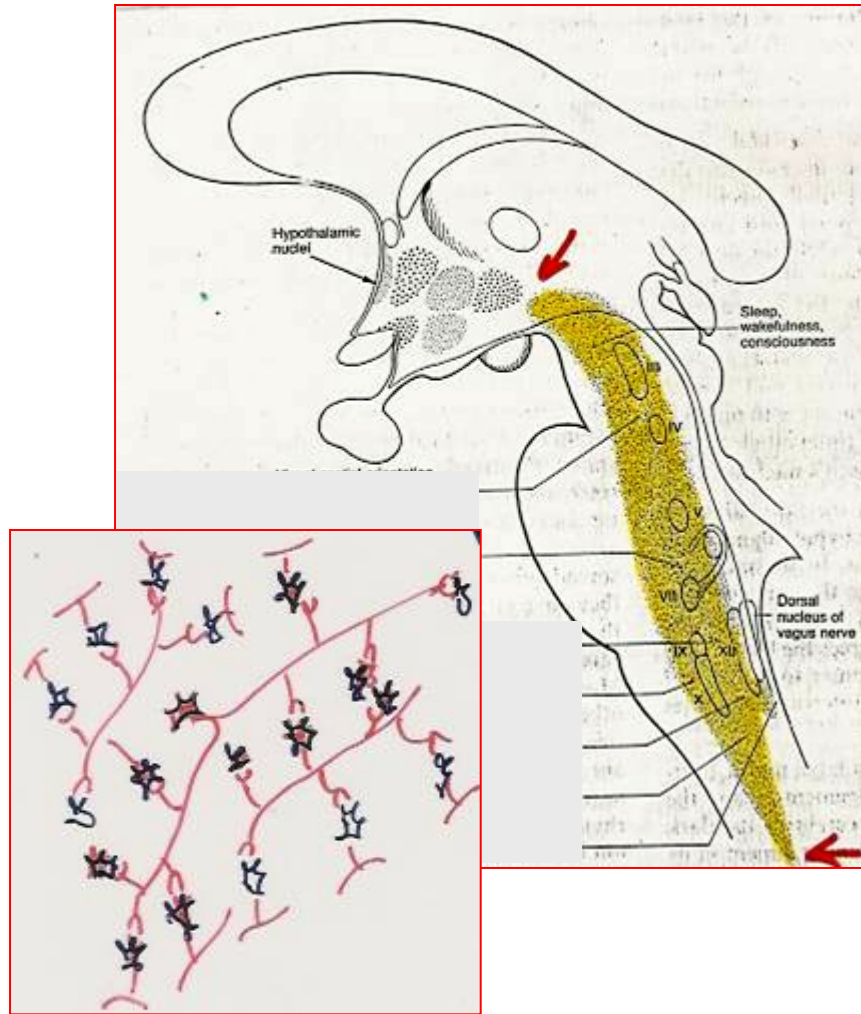








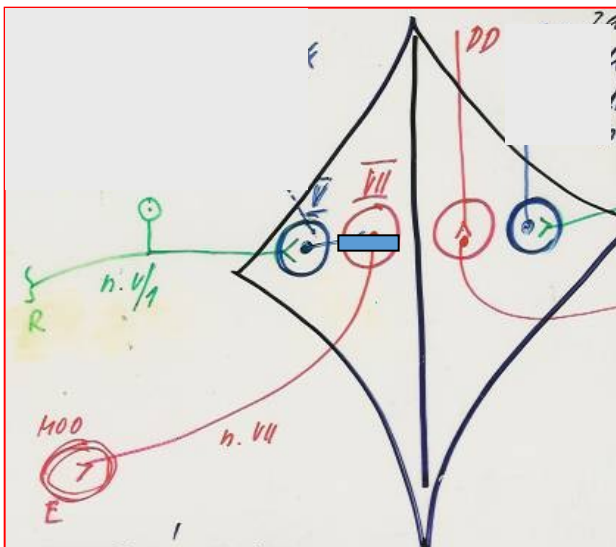
# RETIKLULÁRNÍ FORMACE (RF) KMENE MOZKOVÉHO





# FUNKCE RF

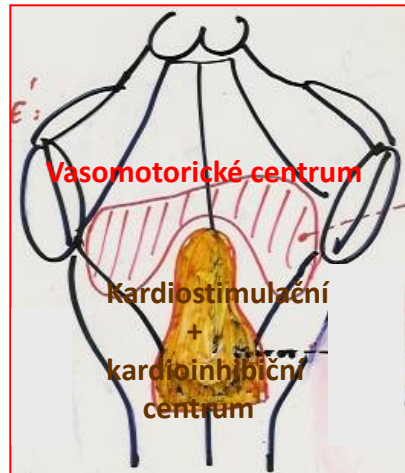
**Propojení jader hlavových nervů**  
zapojení RF do reflexních oblouků –  
**zprostředkování reflexů obranných a**  
**obživných**



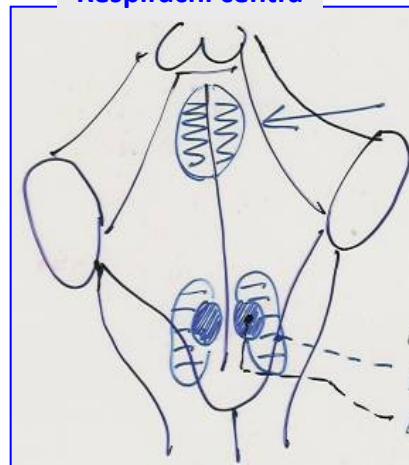
**Rohovkový reflex**  
Receptor – senzitivná jádro n. V – RF –  
motorické jádro n. VII – m. orbicularis oculi

**Descendentní systém RF**  
Centrální regulátor tonu  
svalového

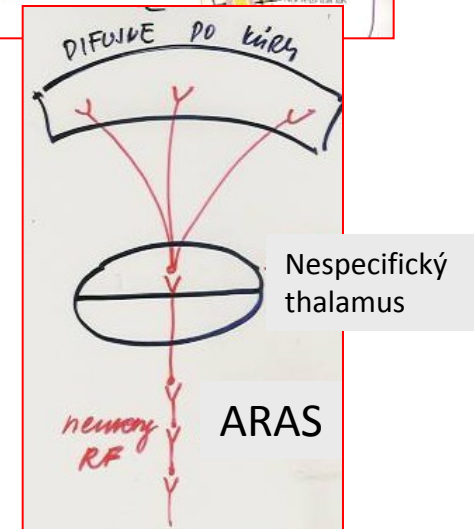
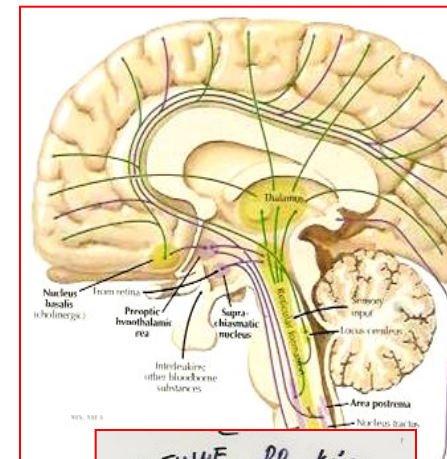
**Vegetativní centra**  
k řízení životně důležitých  
funkcí: dýchání, TK, akce srdeční



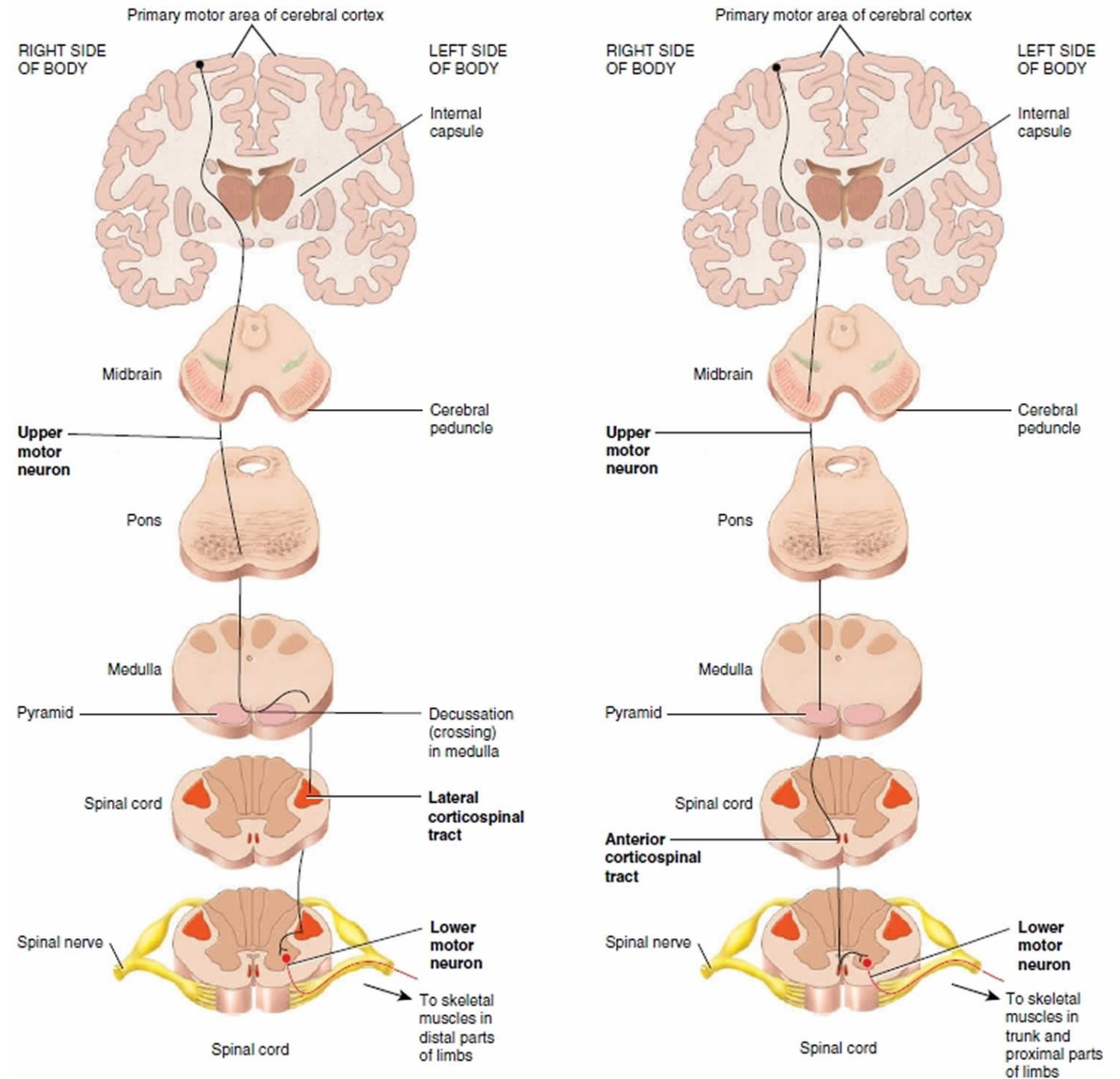
**Respirační centra**



**ARAS – ascendentní retikulární**  
**aktivační systém**  
**Spojení RF s nespecifickým**  
thalamem - tonizace neuronů kůry  
mozkové - **regulace bdění a spánku**



MOTORICKÉ  
(DESCENDENTNÍ)  
PYRAMIDOVÉ (PŘÍMÉ)

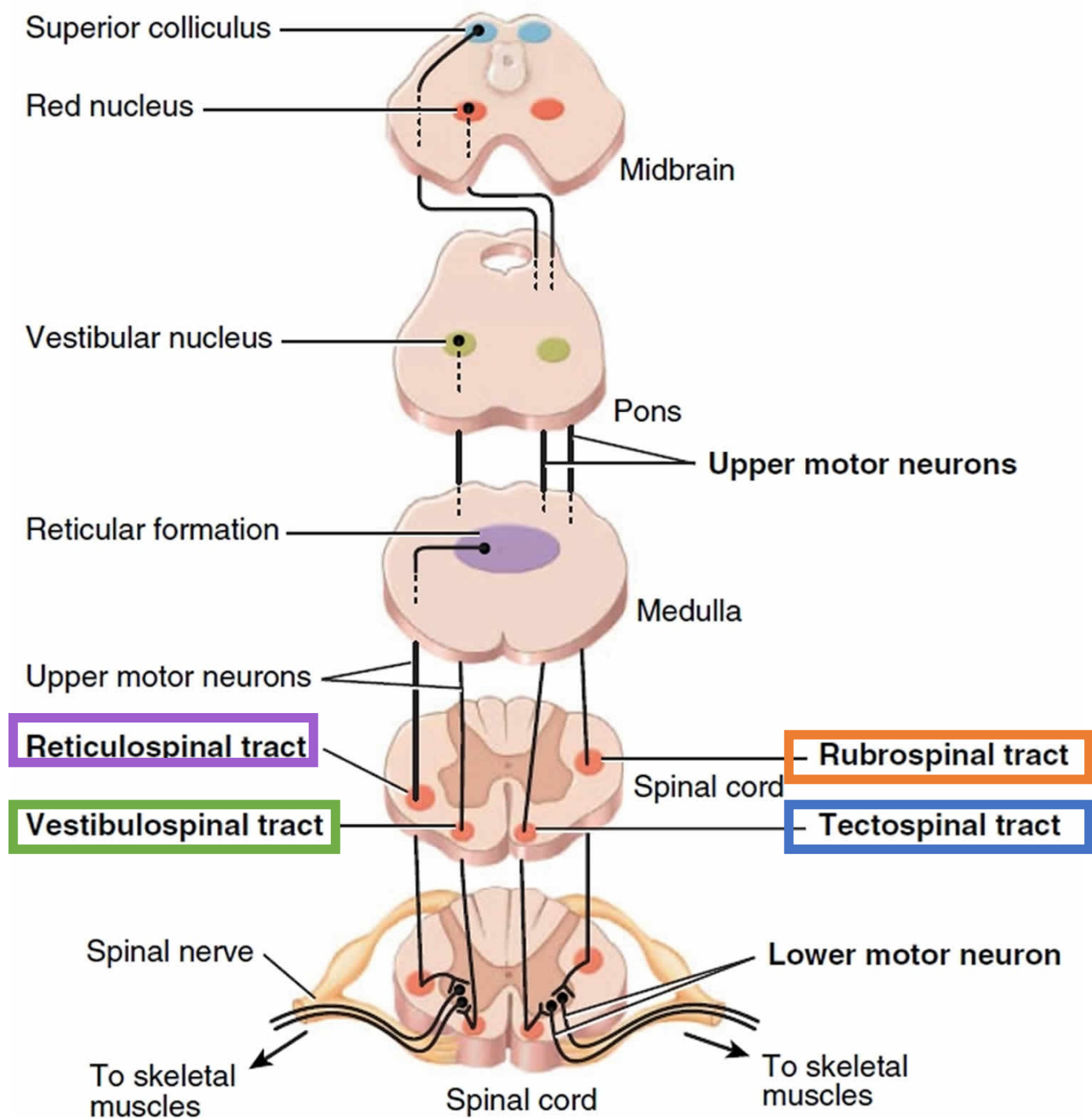


(a) The lateral corticospinal pathway

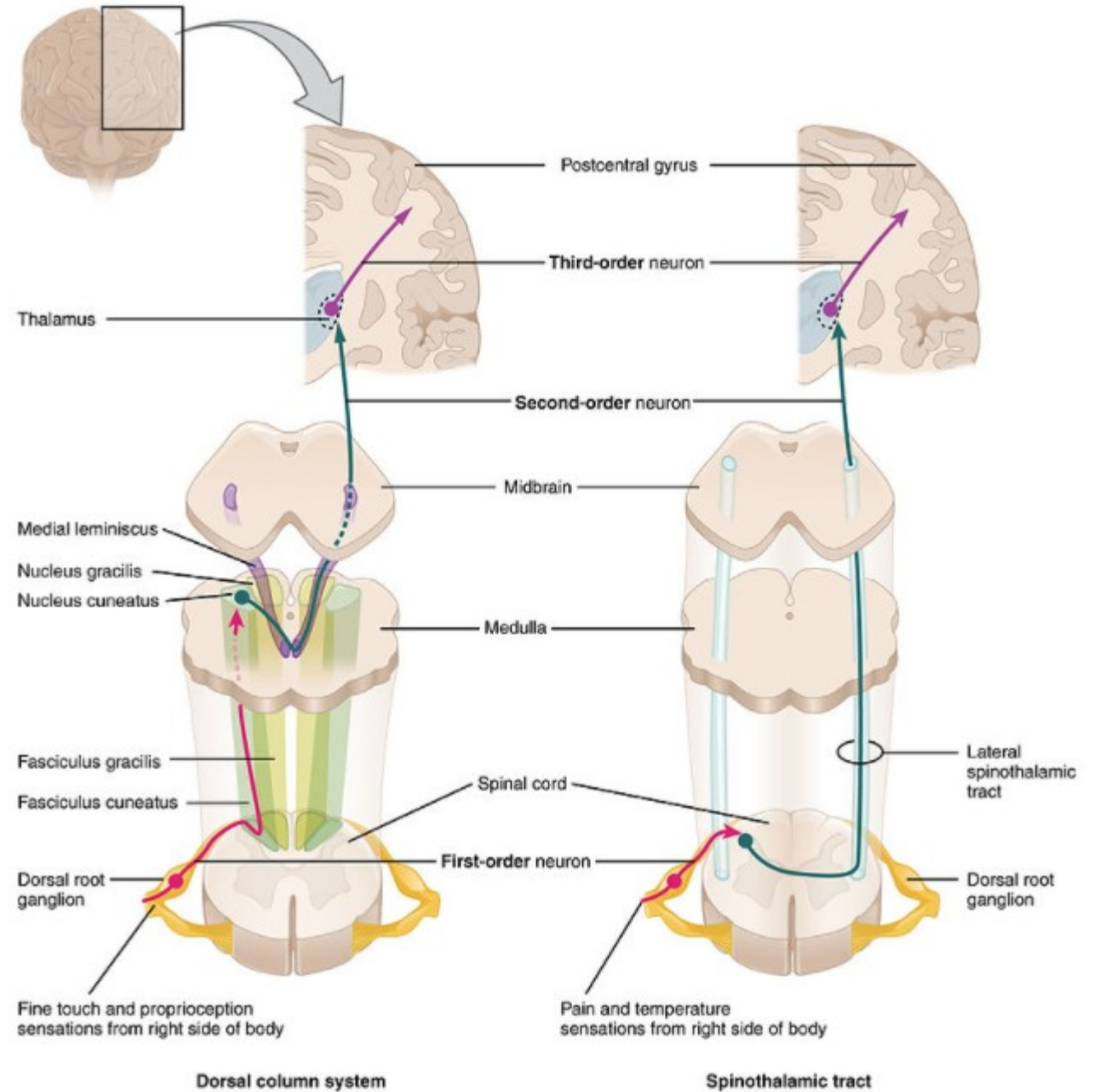
(b) The anterior corticospinal pathway



MOTORICKÉ (DESCENDENTNÍ)  
EXTRAPYRAMIDOVÉ (NEPŘÍMÉ)

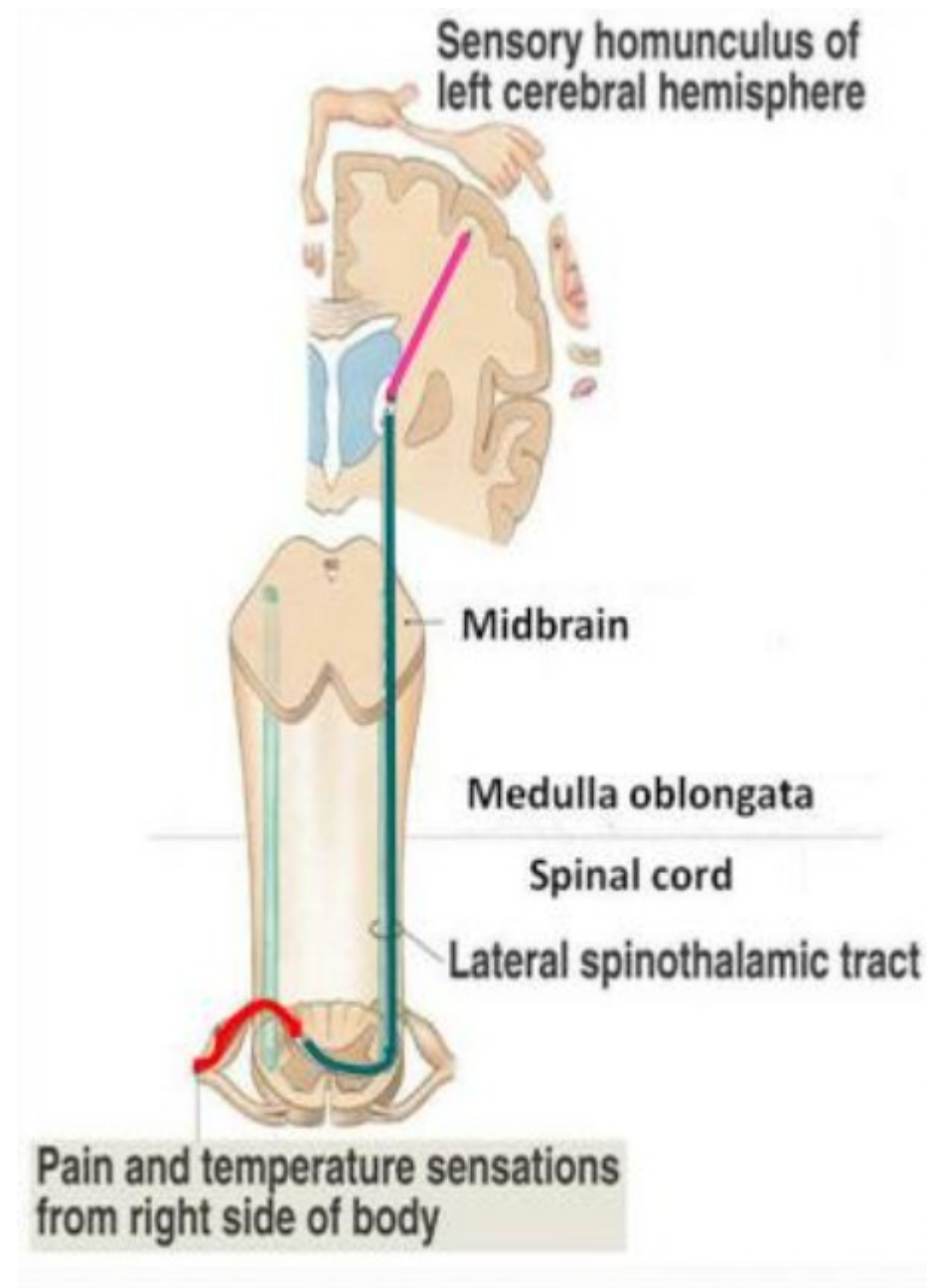
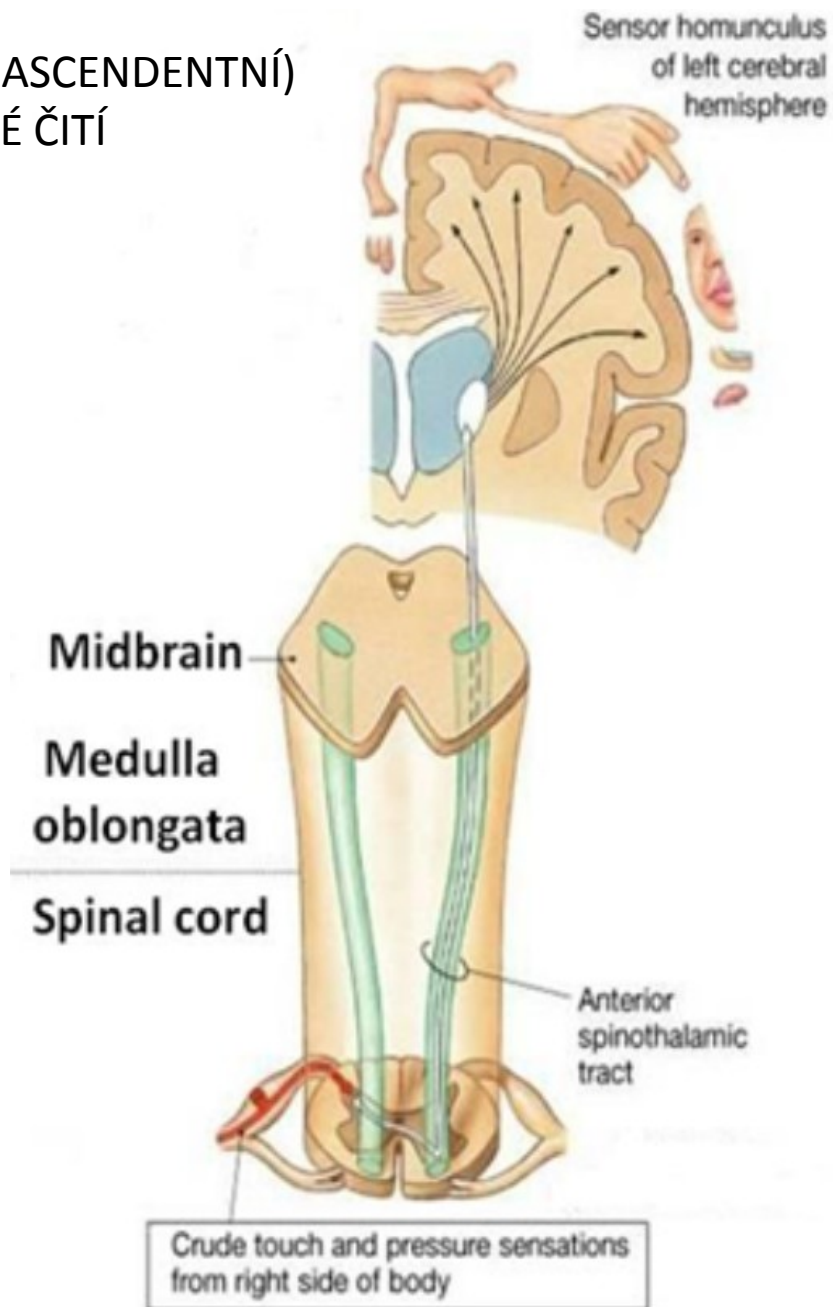


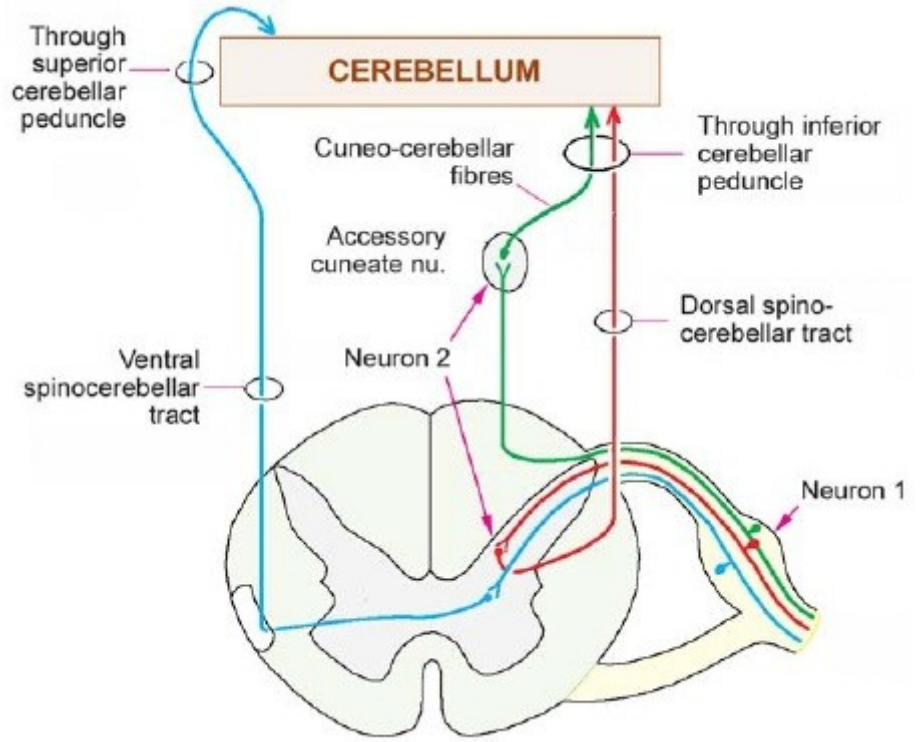
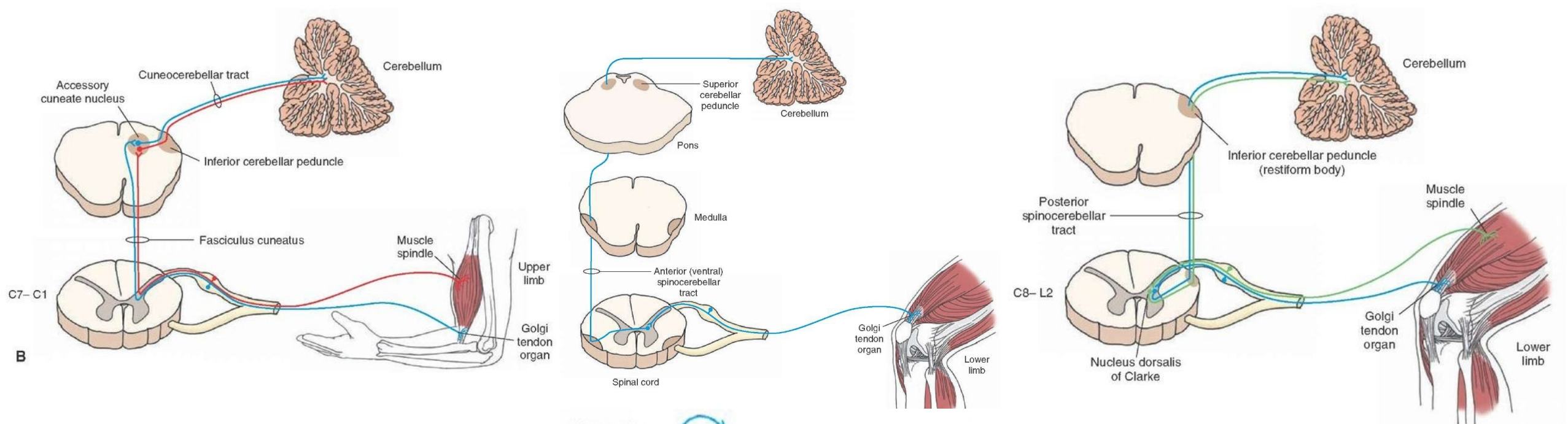
# SENSORICKÉ (ASCENDENTNÍ) EPIKRITICKÉ A PROTOPATICKÉ ČITÍ





SENSORICKÉ (ASCENDENTNÍ)  
PROTOPATICKÉ ČITÍ





SENSORICKÉ (ASCENDENTNÍ)  
PROPRIOCEPCE